

DR. N. L. DOSAJH

**GUIDANCE
SERVICES
IN
INDIA**

ARYA BOOK DEPOT
NEW DELHI-5



2587
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GUIDANCE SERVICES IN INDIA

By

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With 'Introduction' and Chapter III

By

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Published by

ARYA BOOK DEPOT

KAROL BAGH, NEW DELHI-5

Published by :

S. P. GUPTA

ARYA BOOK DEPOT

Karol Bagh, New Delhi-5

Phone : 561221

© 1969 with the Author

S.C.E.R.T., West Bengal

Date... 30-3-77...

Acc. No. 2587...

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371.42

DOS

II Edition : 1969

Price : Rs. 10.00

Printed at :

Rashtravani Printers,

Sadar Thana Road, Delhi-6.

'Let us learn to live with the reality of our natures and to accept our likenesses to our fellowmen, since that apparently was the Divine intent, instead of seeking always to exceed.'

'Each occupation demands a unique pattern of abilities.'

PREFACE TO THE SECOND EDITION

Since the printing of the first edition of this book in July, 1959, Guidance movement in India has gone ahead a good deal. Not only a number of High and Higher Secondary schools have been covered in the country but also plans are afoot to include primary schools, colleges and Universities as well. The name given to the work in colleges has been designated as 'Student Personnel Work'. Even the Kothari Education Commission of 1964-66 strongly recommends that Guidance Programme be introduced in Primary Education. The specific items of recommendations in this connection read as follows :

- *1. The Training programme for primary school teachers should include familiarising them with simple diagnostic testing and with the problem of individual differences and the implications of these differences for classroom practices.
2. There should be atleast one Lecturer in the training school who should be able to deal with the subject of principles of guidance and mental hygiene.
3. Guidance services should be introduced in the training institutions so that the trainees may get first hand knowledge of the problems involved in their organization.
4. Wherever possible, short in-service courses in guidance should be provided for primary school teachers.
5. Simple literature for the occupational orientation of children may be prepared and made available in the regional languages.

*Report of the Education Commission, 1964-66, Item 9.45, Page 238 ;
Ministry of Education, Govt. of India.

(ii)

6. At the end of the primary stage, children and parents should be helped in the selection of courses for further education, and the selection should not be based on the examination results alone.

As regards Secondary Education, the recommendations of the Commission read as follows :

- *1. "A minimum guidance service should be made available to all secondary schools by having one Visiting School Counsellor for every ten schools located within a reasonable distance of one another, and by allocating the simpler guidance functions to the teachers."
2. At the same time, in order to demonstrate what a really comprehensive guidance service is like and what it can achieve, it would be desirable to set up comprehensive guidance services in a few carefully selected schools, preferably one in each district.
3. The necessary supervisory staff to inspect and offer consultation to the school workers should be appointed in the State Bureaus of Guidance."

During the period from 1959 to-date, practically all States in the country have set up State Guidance Bureaus and are actively engaged in providing training to the staff of secondary schools for Career Masters/Mistresses. The heads of the high and higher secondary schools and Education Officers are being orientated towards this guidance movement.

On the recommendations of the Secondary Education Commission, the Ministry of Education set up a Central Bureau of Educational and Vocational Guidance in 1954. Guidance became a centrally-sponsored scheme in the third plan and 13 State Bureaus have now been set up. By the end of the third plan about 3,000 schools had started some kind of guidance, which is only about 13 percent of the total number of secondary schools in the country.

Author

*Item 9.45—Kothari Education Commission Report, 1964-66.

PREFACE TO THE FIRST EDITION

The necessity of an organized programme of guidance in India is being recognized all over the country. Guidance centres have been started at various places and courses in the field of guidance and counselling form an important part of the curriculum of the B.Ed. and M.Ed. But the students and teachers all feel the need of some source from where they could get to know about this guidance movement in India. Unfortunately there is no Indian book on the subject for this purpose. Whatever books we have, are from the West and pertain to the guidance work there. Then again the Higher Secondary Scheme has been started in some schools. The headmasters, teachers and parents are finding it extremely difficult to channelize the students into various courses of the higher secondary. They are looking for some literature on the subject. Realizing the difficulty of the students, parents and teachers, the author has ventured to write this small book which he hopes would go a long way in meeting their difficulty. The author has tried to collect as much information as possible but still he does not claim that it is quite up-to-date. But as more and more information will be available it will be added subsequently. But whatever information is at hand is being placed at the hands of the readers in the form of this book. It is hoped that the book would fulfil a long felt need. In the end the author requests all his friends and colleagues of the profession to send their suggestions and criticisms about this work, so that their suggestions may be incorporated in the next issue.

Author

ACKNOWLEDGMENTS

It was Prof. K. N. Dutt, the Principal of the Govt. Training College, Jullundur, who directed the author's attention to this neglected field. He as Director of Extension Services of the Govt. Training College, Jullundur, organised a seminar on guidance for the Headmasters and thus gave an impetus to the movement of guidance in the Punjab. He also encouraged the author to undertake some research connected with the diversification of the students at the Higher Secondary level. For all this the author expresses his heart-felt thanks to him.

The author is thankful to Dr. C. W. Riddle, who not only went through the manuscript but also contributed the third chapter of this book and also wrote the Introduction.

He also expresses his heart-felt thanks to Dr. A.C. Joshi, Prof. K.N. Dutt, Dr. Gardner Murphy, Dr. A.K.P. Sinha, Late Prof. Paras Ram and all others who have been encouraging him in the pursuit of psychological studies.

For the compilation of the second edition of this book, the author expresses his heart-felt thanks to Shri J.S. Gaur, Counsellor, CBEVG, Delhi, who has revised and brought up-to-date the Chapter on 'Occupational Information'.

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INTRODUCTION

India is determined to work out the best educational programme for her young people. To do this, she is willing to accept and try new procedures and methods that have been of value in the schools of other countries. Guidance is a comparatively new programme in western countries but there it has already shown its worth. India is now experimenting with Guidance in her middle schools and high schools, not because Guidance is an importation from the West and may be perhaps considered as 'modern' but because Guidance may prove to be of help to Indian young people and children.

In certain areas of the country, notably in and around Bombay, programmes of Guidance have passed the experimental stage and appear to have reached the stage of being accepted as a part of the total educational picture. In most areas, however, experimentation is yet to be tried. Programmes have yet to be formulated and materials have yet to be written and prepared.

In writing this small book, Dr. N.L. Dosajh has attempted to make practical and useful material available for the headmaster, the teacher, and other educational personnel. It is a privilege to have a small share in helping with the preparation of this book.

Neither writer is satisfied with the contents, but for the present, the book will have certain values, later writings will be more exact and more detailed. If this volume makes a contribution towards furthering the understanding and the use of systematic guidance in Indian schools, the original purpose will have been met.

C.W. Riddle, Ed. D

HISTORY OF GUIDANCE MOVEMENT IN INDIA

The Guidance Movement in education dates back to 1905, when Frank Parsons of Boston offered assistance to the young-men in the choice of suitable vocations. From its motherland America, the movement has spread all over the world.

In India, the Calcutta University deserves the credit for introducing the guidance movement into this country. It set up the first psychological laboratory in India in the year 1915. In 1938 the Applied Psychology section of the Department of Psychology was set up under the direction of Dr. G. S. Bose, the then Head of the Department. This department conducted research in the field of vocational and educational guidance. After Calcutta, Bombay took the lead in propagating this idea of 'Guidance Movement'. Baltiboi, a retired accountant practising in Calcutta, and Mukerjee, a psychologist from Calcutta University, established Baltiboi Vocational Guidance Bureau in Bombay. Next came Patna University on the scene. It established a Department of Psychological Services and Research in the year 1945. Guidance to college students occupied an important place among its activities. In 1947, the Trustees of the

Parsi Panchayat Funds and Properties Bombay established a bureau for providing guidance services to members of their community. Dr. H.P. Mehta, its Director for the first time published the Journal of Vocational and Educational Guidance. In 1947, the Uttar Pradesh Government at the recommendation of the Acharya Narendra Deo Committee established the Bureau of Psychology at Allahabad. One of the aims of this Bureau was to provide educational and vocational guidance to the students and public. Next Government of Bombay established Vocational Guidance Bureau in Bombay. The first attempt to coordinate the work of persons and agencies working in the field of guidance all over the country was made in March 1953. Dr. W.L. Barnette, an American Fulbright Professor, held a workshop of guidance workers in the country at Central Institute of Education under the auspices of the Ministry of Education. The following guidance workers attended the workshop :

1. Shri Veda Parkash, Asstt. Educational Adviser to the Government of India.
2. Dr. E.A. Pires, Principal, C.I.E., Delhi.
3. Prof. Uday Shanker, Reader, C.I.E., Delhi.
4. Dr. S. Jalota, Professor of Psychology, Banaras Hindu University, Banaras-5.
5. Shri D.S. Nigam, C.I.E., Delhi.
6. Shri P.D. Sharma, C.I.E., Delhi.
7. Shri A.N.K. Nair, Deputy Director of Employment Exchanges, D.G.R. & E., Ministry of Labour, Gurudwara Road, New Delhi.
8. Dr. B. Kuppaswamy, Professor of Psychology, University of Mysore.
9. Shri P. N. Segal, Assistant Statistical Officer, D.G.R. & E., Ministry of Labour, Gurudwara Road, New Delhi.
10. Shri Nullraj Joseph, Technical Education Officer, Directorate of Public Instruction, Madras-6.
11. Shri S.N. Srivastava, Principal, Teachers' Training College, Bikaner, Rajasthan.
12. Dr. N.L. Dosajh, Government Training College, Jullundur.
13. Dr. H.P. Mehta, Vocational Guidance Bureau, Parsi Panchayat Officer, 209, Hornby Road, Fort, Bombay.
14. Dr. W.L. Barnette, Jr. Visiting U.S.A. Professor of Psychology, Vocational Counselling Centre, University of Buffalo, Buffalo, 14, New York.
15. Shri Durganand Sinha, Department of Applied Psychology, Patna University, Patna-5.
16. Shri F.S. Chothia, Director, Government of Bombay, Vocational Guidance Bureau, Elphinstone Technical High School, Building 3-Cruickshank Road, Bombay.
17. Dr. C.W. Riddle, United Christian Schools, Jullundur.
18. Dr. Rajana Sidhanta, Department of Philosophy and Psychology, Lucknow University.
19. Dr. Jean Forrester, St. Christopher's Training College, Vepery, Madras-7.

A second seminar was held in November, 1954, again at the Central Institute of Education. It was decided to form an All India Educational and Vocational Guidance Association and to affiliate it to the International Association for Vocational Guidance. In August, 1960, first conference of Heads of Govern-

ment Bureaus of Guidance was convened by the CBEVG. In May, 1962, the All-India Workshop for the implementation of the centrally sponsored scheme for Guidance was held.

The Guidance Movement had spread all over India when in October 1954, the Government of India, Ministry of Education, established the Central Bureau of Educational and Vocational Guidance at Delhi and offered financial assistance to various State Governments for setting up bureaus of guidance or expanding the existing ones. As a result eleven State bureaus and three sub-bureaus were established. Only two States—Jammu and Kashmir and Madras could not set up the bureaus of guidance. This financial assistance for setting up guidance agencies was offered by the Central Government to private educational or research institutions. As a result by June 1962 such agencies came up.

Guidance Movement also developed in the National Employment Service. During the Second Five Year Plan Vocational Guidance and Employment Counselling was introduced as one of the programmes of the National Employment Service. A Vocational Guidance Unit was set up at the headquarters of the National Employment Service in the Directorate-General of Employment and Training. Also Vocational Guidance Sections were set up in 95 Employment Exchanges. For the purpose of bringing about closer cooperation between the two types of agencies a central coordination committee for Vocational Guidance and Employment Counselling was formed at the Centre. At the State level, State Co-ordination Committees were set up. Similarly in some of the Districts, District Co-ordination Committees were formed.

Now follows a brief history of some of the important institutions of Guidance in the country together with a summary of the work done by them :

Allahabad (U.P.)

Bureau of Psychology—It has a very elaborate organizational set-up. Test construction and training of personnel have been the main functions of this bureau. It has very successfully organized a systematic programme of group guidance in the schools. Procedures for individual guidance and counselling have been worked out. Some of its important publications are :

1. Bureau of Psychology, Its Scope and Its Importance to the Country (out of print) (1948)
2. Samples of Work Done (out of print) (1948)
3. Procedure of Personal Guidance (out of print) (1950)
4. Procedure for Vocational Guidance (1950)
5. An Educational Guidance Project (1952)
6. The Construction and Standardization of the Verbal Group Test of Intelligence B.P.T. 7 (Revised) for Age-Group 13 plus (1955)
7. A Group Guidance Project (Reprinted) (1958)
8. The School Psychologist (Reprinted) (1958)

Tests Standardized for the Manovigyanshala

1. Stanford-Binet Hindi Adaptation
2. Verbal Group Test of Intelligence for 10-plus (B.P.T. 6 Revised)
3. Verbal Group Test of Intelligence for 12-plus (B.P.T. 12)
4. Verbal Group Test of Intelligence for 13-plus (B.P. T. 7 Revised)
5. Verbal Group Test of Intelligence for 14-plus (B.P.T. 8 Revised)
6. Verbal Group Test of Intelligence for Adults (B.P.T. 11 and others)
7. Verbal Group Test of Intelligence for Class VIII (B.P.T. Forms A and B)
8. Pidgeon Non-Verbal Group Test (Adapted)
9. Space Test (B.P.S.T. 1)
10. Hindi Attainment Test for Class VIII (B.P.A.T. 2)
11. General Hindi Test for Class X.

Tests Adapted by the Manovigyanshala

1. Murray's Thematic Appreception Test.
2. Schwartz' Social Situation Pictures Test.

Norms applicable to U.P. for the following foreign tests

1. N.I.I.P., London, Group Tests 70/23.
2. N.I.I.P., London, Form Relations Group Test.
3. Raven's Progressive Matrices (1938) Sets ABCDE.

4. Raven's Coloured Progressive Matrices (1947) Sets A, Ab, B.
8. Mechanical Aptitude Tests—Detroit Manual Ability Tasks, Tweezer Dexterity and Steadiness Tester.

Others

1. A Survey of Spontaneous Psychical Experiences—School Children of Uttar Pradesh.
2. A Study in E.S.P. (1964) 3-units for Vocational Selection (1965) (Publication No. 14).
3. Personality Difficulties of Students (1966) (Publication No. 15).

Bangalore :

State Bureau of Educational and Vocational Guidance,
Mysore.

Though this Bureau was among the last to be established but has a big team of workers. The bureau has as many as twelve staff members including a Director and two Assistant Directors. Some of the publications of the Bureau are as follows :

1. S.S.L.C.—What Next ? 1966.
2. Job Opportunities in the Public Works Department, 1966.
3. Careers in Dairying in Mysore State, 1967.
4. Careers in Medicine and Allied Fields in Mysore State, 1967.
5. Librarianship as a Career, 1967.
6. Careers in Banking (Revised) in Mysore State, 1967.
7. Careers in Life Insurance Corporation of India in Mysore State, 1967.
8. Courses in Teacher Training in Mysore State, 1967.
9. Agriculture and Allied Fields, 1967.
10. Careers in Forestry, 1967.
11. Careers in Food Technology and Catering as a Career, 1967.
12. Courses in Commerce Subjects, 1967.

Bikaner :

State Bureau of Educational and Vocational Guidance,
Bikaner (Rajasthan).

This bureau came into existence in 1968. In July 1959, the bureau introduced its first group guidance programme in some high schools at the five divisional headquarters of the State—Jaipur, Jodhpur, Bikaner, Udaipur and Kotah. In 1960, a similar programme was carried out again. Some of its publications are :

1. Job Opportunities in Rajasthan, 1960 (in Hindi).
2. Report on Career Convention, Conference and Exhibition, 1962.
3. Your Children (in Hindi), 1965.
4. Science Selection in Rajasthan, 1966.

Bombay-1 (Maharashtra)

Institute of Vocational Guidance, Elphinstone Technical High School Building, 3, Cruickshank Road, Bombay-1.

It was in April, 1950 that the Government of Bombay resolved to set up a Vocational Guidance Bureau in Bombay. During the Second Five Year Plan the Vocational Guidance Bureau in Bombay was expanded and converted into the Institute of Vocational Guidance. The main task of the institute was training of teachers in the principles and techniques of Vocational Guidance and Research. Two Sub-Bureaus were opened—one in Poona and the other in Ahmedabad. The Sub-Bureaus started functioning from April, 1957. After bifurcation in 1960, Ahmedabad Sub-Bureau went under Gujarat Government. In the Third Five Year Plan, the Institute of Vocational Guidance was converted into the Institute of Vocational Guidance and Selection. During the first year of the Fourth Five Year Plan no expansion could come up.

The Institute has printed the following menographs :

1. Degree and Post-graduate Courses in Agriculture.
2. Diploma Courses in Engineering in Maharashtra State and facilities given to the Diploma holders in Engineering.
3. Ranger's Course in Forestry.
4. Diploma Course in Forestry.
5. Colleges in India giving Degree Course in Engineering/Technology.

6. Diploma Course in Seasoning and Preservation of timbers.
7. Open Merit Scholarships in Arts, Sciences, Commerce and Law Colleges.
8. Open Merit Scholarships and Free Studentships in Engineering Degree Courses.
9. Loan Scholarships in Engineering Colleges and Polytechnics in Maharashtra State.
10. Open Merit Scholarships and Free Studentship Engineering Diploma Courses.

Bombay-52

Gujarat Research Society, Sansodhan Sadan, South Avenue, Khar.

Gujarat Research Society started its programme of Educational and Vocational Guidance in January, 1954. It has been carrying on in individual guidance and counselling services. It also maintains an information and testing centre. It has standardised the following psychological tests :

Intelligence Test by A.J. Joshi.

Vocabulary Test by N.P. Dave.

Arithmetic Ability Test by N.P. Dave.

Mechanical Comprehension Test by N.P. Dave.

Abstract Reasoning Test.

Vocabulary Test by N.C. Maniar.

Reading and Comprehension Test by N.C. Maniar.

Calcutta-17

Bureau of Vocational and Educational Counselling

It is a private organisation carrying on Educational Counselling, Personal Counselling, Vocational Guidance, Marriage Counselling etc. It has published :

1. Ronnie Wants a Job.
2. Stipends and Scholarships for Anglo-Indian Youth.
3. Licensed Measurers and the Customs Service.

Chandigarh

In the Punjab, the Guidance Movement has been through a number of phases. In the year 1958, a Unit of Guidance was attached to the Department of Psychology, Govt. Training College, Jullundur. This unit did yeoman's job in providing guidance services to the local school-going population. Simultaneously, Dr. C.W. Riddle, set up a small guidance unit at Jullundur for Christian schools. These were the first attempts to start Guidance Movement in the State of Punjab.

Though the scheme of Educational and Vocational Guidance at the State level was first initiated in 1960-61, yet it could not be put into force till 1962-63, when for the first time a counsellor was appointed though on purely temporary basis on the 1st of March, 1962. To assist the counsellor in the conduct of his work two Technical Assistants were appointed on 4th June, 1962 and 1st August, 1962 respectively. These members of the Bureau held a short orientation course in guidance and evolved a cumulative Record Card. They prepared a list of sources wherefrom consolidated occupational information was available. In addition, they held two six weeks training courses for Teacher Counsellors. The number of Teacher Counsellors trained during this period was 42.

On the 5th of December, 1962, the State Bureau of Educational and Vocational Guidance, Punjab, became the first casualty of Chinese Aggression in the efforts of the State to economise its resources. This institution was again revived on the 17th of December, 1963 after a lapse of about one year.

In the year 1964-65, the University of Punjab instituted a One Academic Year Postgraduate Diploma Course in Educational and Vocational Guidance. In August, 1966 the whole Bureau was reorganized into two units, the Testing Unit and the Counselling Unit. But the strength of the Bureau was far too short of the minimum, laid down by the Ministry of Education, Government of India, New Delhi. Even then, this institution completed the following programme of work during the year 1966-67 :

- (i) "Extracting Factors operative in the different Aptitude Test Battery for the diversification of students at the Higher Secondary level."

- (ii) Development of Norms of Standard Progressive Matrics Test.
- (iii) A pamphlet on 'Organization of Guidance Services in Punjab'.
- (iv) Publication of the Manual for the Bureau's Cumulative Record Card.
- (v) Publication of Guidance News Quarterly.
- (vi) Publication of the pamphlet careers in Pharmacy.
- (vii) Held three training courses for Career Masters.

In October, 1966, the programme of Guidance Bureau was interrupted because of the reorganization of the State of Punjab. Much against the wishes of the Director of the Bureau, the Bureau was split up into two wings. The Testing Wing of the Bureau was passed on to the Haryana State and the Counselling Wing remained with the Punjab State.

Delhi-6

Central Bureau of Educational and Vocational Guidance, 33, Chhatra Marg—CBEVG was established in October, 1954 by the Government of India, Ministry of Education. The Central Bureau did a good job in organising the guidance movement in the country. It published a good deal of literature for the use of the guidance workers. Some of their publications are listed below :

1. Your Child at the Cross-roads.
2. Manual of Educational and Vocational Guidance.
3. Educational and Vocational Guidance in Multipurpose Schools.

The main purpose was of acquainting school and college students, their guardians, and teachers with the training facilities available in this State in various fields. The bureau has brought out the following publications :

1. A Practical Handbook on Guidance for Secondary Schools.
2. Your Career.
3. Defence Services (in Hindi)

Shillong (Assam)*State Bureau of Educational and Vocational Guidance*

The Bureau has prepared the following Guidance Literature :

1. Technical Institutions offering Degree Course in India and Diploma and Certificate Courses in Assam.
2. Courses and Careers : Educational and Training facilities for the Matriculates in Assam.
3. Courses and Careers : Educational and Training facilities for the under Matriculates in Assam.

WHAT, WHY AND HOW OF GUIDANCE ?

We sometimes come across maladjusted persons in schools, colleges and professions—students failing in examinations year after year because of a wrong choice of subjects, employees quarrelling with their employers for reasons generally not known to both, persons shifting from one job to the other at very short intervals because they find themselves misfits there. Such cases of round pegs in square holes are found practically in every walk of life. The author very recently conducted a survey of the maladjusted children in the schools of the Punjab and found that about 25 percent of our school children are maladjusted. If we work out the figures of maladjusted persons in other walks of life, the figures will in no way be less astonishing. Now why is there such a chaos and disruption in the life of some? May be that those misfits in life were not guided rightly or they did not get an opportunity for right guidance. May be there were no facilities for guidance neither from the State nor from the community. If proper guidance centres were instituted, many lives would be saved from being wrecked. A network of guidance centres all over the country would go a long way in bringing happiness to many. Left to themselves, many parents and children are likely to make mistakes for which they

have to suffer for the whole life. The whole programme of guidance needs a specialised handling.

WHAT IS GUIDANCE ?

Some people think guidance is synonymous with education. They think the whole of education to be nothing else but guidance. There are others who classify guidance into various categories *e.g.* vocational guidance, civic guidance and moral guidance etc. Some regard even psychotherapy as guidance. There is a good deal of disagreement about the definition of guidance and its main divisions. Koos and Kefauver* divide guidance into adjustment and distribution. But here also the division is merely for convenience sake. The division of guidance into water-tight compartments is not possible. All kinds of guidance are closely linked up together. In practice the whole guidance is a unitary process, educational guidance is dependent upon vocational guidance. Some consider the vocational guidance to be pivotal in character and that all other types of guidance are centred round it. But this is rather a narrow outlook, because vocation is not the only thing in life. For example our aesthetic, recreational, civic or moral guidance is not purely dependent upon the choice of our vocation. So guidance includes every phase of human life *i.e.* health, home, family, leisure time, personality, religious life, moral and civic, vocational and in fact every phase of life. In other words guidance is a process of letting the individual discover himself—his natural endowments, potentialities, aptitudes etc. and then to provide the proper environments for the fructification of those potentialities, or to help the individual to arrange for the proper accomplishment and utilisation of those potentialities to the best advantage of the individual and the State.

WHY GUIDANCE ?

Why is there a need for guidance ? Education in India is spreading at a very rapid rate. Table I, given at the next page, shows the number of students in various classes in Indian schools during the various years in the past.

*Leonard V. Koos and Grayson N. Kefauver, 'Guidance in Secondary Schools' New York : The Macmillan Company, 1932, pp. 15-22.

TABLE I

STATISTICS OF ENROLMENT OF STUDENTS IN VARIOUS CLASSES IN INDIA

Schools	Years					
	1946-47	1947-48	1951-52	1953-54	1954-55	1955-56
Primary	10,047,317	11,068,273	16,288,960	20,812,789	22,196,166	22,919,734
Middle	11,029,055	...	1,808,726	2,431,716	2,595,041	...
High	1,571,397	3,020,598	2,968,043	3,978,332	4,297,845	8,526,336
University	...	183,238	323,882	470,794	521,842	575,271
Professional Educational	...	138,450	238,219	270,596	234,313	1,933,825
Teacher Training	...	42,157	...	76,706	73,435	104,051

The figures show that the number of students on roll during the past ten years in practically all classes has more than doubled. The number of teachers has nearly trebled during this short period.

This rapid increase in the number of the educated persons has already upset the employment position and has necessitated a corresponding increase in the openings for these educated unemployed persons. All this state of affairs has resulted because of lack of a proper guidance service.

Now let us have a glance at the population figures given below in Table II.

TABLE II
POPULATION FIGURES*

<i>Census Year</i>	<i>Number in Lakhs</i>	<i>Increase (+) decrease (-) during preceding decade (in lakhs)</i>
1891	2,359	
1901	2,355	— 4
1911	2,490	+135
1921	2,481	— 9
1931	2,755	+274
1941	3,128	+373
1951	3,569	+441

The figures show a very rapid increase in population from 1931 onward and hence suggest an imperative need for intensive and extensive guidance in the techniques of family planning.

The figures of the delinquent children in the schools of the Punjab are given at the next page.

*Taken from Census of India, 1951, Vol. I, India, Part 1-A Report, p. 122.

*TABLE III

PERCENTAGE OF DELINQUENT CHILDREN
IN THE PUNJAB SCHOOLS CLASS-WISE

Type of Delinquency	Classes					
	X	IX	VIII	VII	VI	V
Stealing	·91	4·3	2·0	1·76	2·11	2·41
Truancy	10·2	8·9	6·41	8·42	6·1	·74
Bullying	2·3	3·36	2·5	3·1	2·85	3·23
Abusing	5	6·5	6·35	6·22	5·1	5·84
Disobedience	2·43	3·02	·65	2·4	1·69	1·35
Gambling	1·36	2·3	1·23	·94	2·52	1·19
Destructiveness	1·36	1·6	1·53	1·88	1·63	1·63
Homosexual activity	·84	·7	·52	2·06	2·84	2·2
Untruthfulness	8·4	14·63	8·88	8·8	7·27	11·08

The figures in the Table III clearly show that the problem of maladjusted children is fairly acute and hence there is a dire need for guidance clinics for our school children and college students. And the various agencies that can give this help are the home, the school or college or the State. In fact a co-operation of all these agencies is needed for a good programme of guidance.

The manpower or the labour force of our country has not been harnessed fully for the creation of wealth so far. The proper utilisation of the available manpower is of national importance. There is no coordination between the persons available for a particular profession and the vacancies existing for persons of that profession. No such planning has been done.

**Occupational Distribution of Applicants in India on Live-Register of Employment Exchanges as on 31st August, 1953 is as follows :

1. Industrial Supervisory	5057	24%
2. Skilled and Semi-skilled	48147	10%
3. Clerical	143825	30%
4. Educational	13070	3%

*Delinquency by Dr. N. L. Dosajh, Punjab Kitab Ghar, Jullundur, p. 11.

**Employment Exchanges, Labour Market and Job Opportunities by B. S. Gokral, Journal of Vocational and Educational Guidance, Vol. I, No. 1, p. 17.

5. Domestic Service	16726	43%
6. Unskilled	239269	43%
7. Other	32797	8%

Let us study the clerical registrants. In December 1951, the number of clerical registrants which stood on the Live Register of all Employment Exchanges in Indian Union was 85057. In December, 1952 the figures shot upto 115,964 and at the end of August 1953 it rose to 143,825 constituting 30% of the Live Register. Whereas if we study the vacancies notified by Government for clerical jobs, we find that the figures are as follows :

<i>Years</i>	<i>1952</i>	<i>1953</i>
Quarter ending May	13526	6091
Quarter ending June	12461	8113
Quarter ending September	11304	5124

The statistics show that whereas the number of clerical registrants has been increasing during the years 1952 and 1953, the number of clerical vacancies has been continuously falling at the tremendous rate. This is only one instance. Such is the case in many other professions as well. Such figures clearly indicate a lack of planning and absence of proper guidance facilities. And further they suggest the opening of guidance centres on a country-wide scale.

The number of failures in the University examinations is on the increase, from year to year. Lack of proper educational guidance is very much responsible for this state of affairs.

The opening of institutions of higher education High and Higher Secondary Schools, Colleges—Arts and Science, Engineering Colleges, Medical Colleges etc., is not in conformity with the future employment possibilities. Students are just rushing towards University education without keeping in view whether there are any future openings for them or not. Looking to the needs, the results of various calculations show that matriculate workers should increase from 5.2 million in 1961 to 16.6 million in 1976 and 32.6 million in 1986 but actually the population of matriculates and above would grow from 8 million in 1961 to 27 million in 1976 and 56 million in 1986. Similarly the graduate workers should increase from 1.1 million in 1961 to 3.3 million in 1976 and 6.5 million in 1986 but the total number of graduates is likely to grow from 1.5 million in 1961 to 4.5 million

in 1976 and 9 million in 1986. This would mean lot of unemployment for these educated persons. So the need is that this unplanned and uncontrolled expansion of secondary and higher education should be restricted. The efforts should be made to vocationalise secondary education and professional education at the University stage. The existing number of students should be diverted to vocational education at the secondary stage and professional education at the University level. To do so a very effective guidance programme is needed.

As recommended by Kothari Education Commission beyond the lower secondary stage, a system of selective admissions is necessary. Those who cannot go for higher secondary education or colleges have got to be diverted to vocational schools and vocational colleges. To do this effectively, a very effective programme of guidance is required.

In the present educational system there is no relationship between education and employment. This can be done effectively by strengthening the programme of guidance in schools and youth personnel work in colleges.

Education in this country so far has been planned rather unscientifically. It has failed to provide any very specific purpose to most of the educands except that of cramming for passing examinations. A good motive force for the students, in very many cases, has been lacking. People have just been rushing for higher education without understanding where they are heading to. This has resulted in quite an unplanned progress of higher education. The outcome of this has been mass frustrations of the educated ; as a consequence of which we are faced with the problems of indiscipline, unemployment, misfits, hunger and want. Unless some concentrated planning, relating the educational system to the manpower needs, is done it is feared that the situation is going to become worse. The Kothari Education Commission has rightly recommended the slowing down of the tempo of expansion of higher education. There is excess supply of many types of educated manpower resulting in a huge waste. In certain other areas there is a shortage of manpower. According to Shri Sanjiva Reddy, "After 20 years we feel we had planned in a lopsided way because we gave priorities to things which were not urgent." "There has been overestimation of the manpower requirements of different categories of higher educated labour, which is a cause for much concern." "Again an

imbalance has grown up between the development of general and vocational education, the former is far exceeding the demand and the latter is falling much below it. Consequently, the output of matriculates and graduates in arts and commerce is far in excess of demand. Whereas trained personnel for the development of Agriculture, Industry and Research is far in short supply." According to the Kothari Education Commission, "During the next two decades, the demand for secondary and higher education will increase still further. In order to check this evil, it will be necessary to adopt some definite policy of selective admissions so as to relate enrolments to facilities available and to maintain standards." Again our educational system is completely examination ridden. A Departmental, a Board or a University examination is the be-all and end all of this system. The result of such a system has been that our best students are those who are bookish. In such a system the student is faced with uncertainties about his future. Their education means without a specific goal. Again our educational policy in the past has been very shifting. We thought of 'Basic Education System', worked on it half heartedly and more or less gave it up. We switched over to Higher Secondary Schools and now there is a demand for scrapping Higher Secondary and reversion to ten-year school system. The Members of Parliament Committee on Education has recommended a return to the old 10 year high school system in all States. These are all recommendations based on 'subjectivity' and 'subjectivity' is mostly undependable and variable. We need a more objective and scientific approach to the problems of education since we cannot afford to play with the lives of our future generations; and a poor nation, as we are, we cannot afford to squander finances because of the vagaries of different people. In the words of Leonard H. Marks—"Education has enduring values. It is not, subject to the vagaries of changing fashion." So what we need is to be more scientific in our outlook. These primitive trial and error techniques will not do. What is needed is a careful scientific experimentation, followed by implementation. These hit and miss methods have already exhausted the scanty financial resources of the country. It is high time we be more scientific and mature in our outlook. "It is the scientist who can help us in separating what is dependable from what is unstable or variable." Let these hypotheses of our thinkers be

tried out by Experimental Educationists and Educational Psychologists and if established, be implemented on small samples with firmness.

Whereas there is a clamour for higher University general education, the land in the country, is being neglected. There are barren tracts of land uncultivated and those that are cultivated are on very primitive lines. All this has resulted in starvation and hunger in the country. We who were once an affluent country are now begging for food from others. Why can't our students who are unfit for University general education be diverted to vocations in the field of Agriculture, Industry, Technology and others which have enough room and are more productive and useful to the Nation and to the individual? How can all this be done? Here it is that we need this specialized service of 'Guidance and Counselling' and 'Students Personnel Work'. It is the trained guidance-workers who can help the parents and their guardians to understand their children more objectively on the one hand and the "World of Work" on the other with their modern techniques of dissemination of occupational information, Psychological testing, and individual and group techniques of Educational, Vocational and Personal Guidance and Counselling.

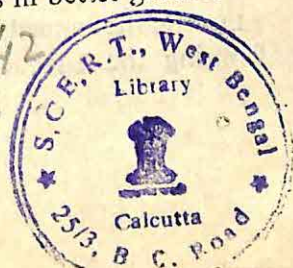
Guidance lays stress on more intensive, scientific and long-range planning at the top. For example, if it could be worked-out fairly accurately the country's manpower needs in terms of various jobs and professions for say twenty years ahead, and all admissions into schools, colleges, universities and other institutions be based on the future needs, a number of frustrations, wastage and unrest among the students can be avoided. This information about the future position of manpower needs will go a long way in helping students in making wiser plans about their educational and vocational careers. Vocation should be given the first importance because it is felt that in the present age future vocation for a youngman or young-woman provides the greatest motive for him or her to work hard. There is considerable evidence to show that having made vocational choices increases students' motivation and results in better grades.

S.C.E.R.T., West Bengal

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GUIDANCE AS A PART OF THE EDUCATIONAL PROGRAMME

School administrators sometimes are skeptical when the subject of "guidance" enters the discussion. They justly want to know what is new and different about this programme which has become a part of education in Western countries. "Over the centuries, have not teachers given guidance to their students?" is a common question. The answer to the question must always be, "Yes".

However, what is new in Guidance in the systematic way in which an old function of education is being carried out to help the students. It is being recognized that no agency of society has such access to the child and such opportunity to study him or to guide him as has the school. The problems of youth have increased as the society has become more complex, and guidance help beyond that offered in the home is becoming more and more needed. As the children spend many years in school during a very formative period of their lives, it seems logical that the school should be the agency that offers whatever help can be made available.

During the immediate years ahead, two problems will be confronting the educators connected with middle schools and

high schools. One problem will be concerned with helping students select the proper course of study. The other problem will be concerned with assessing the achievement of the individual student. These problems are inherent in the Higher Secondary Scheme. Guidance is directly concerned with both of them.

A guidance programme provides several definite services for the benefit of both the students and the school staff. One service is known as 'Individual Inventory Service'. By means of this service, accurate and significant information about the individual student is collected and organized into a usable form. This form is called the 'Cumulative Record Form', discussed elsewhere in this book.

The objectives of the Individual Inventory Service are several : to make valuable information about the student available for counselling purposes, to indicate his or her patterns of development, and to provide a summary of information that can accompany the student to the next state of training. When the school knows the potential ability of the student, as well as his actual achievement, the teachers can know how much or how little to expect of the child. Other factors are also necessary for helping the student choose a subject : a knowledge of his interests, his social and economic opportunities, the probable motivation for selecting one course or another, and the structure of personal values which the young person has. With this much information as a minimum the school is then able to help the student choose his course of study in a concise and systematic manner.

Another service of Guidance is needed, however, for guiding young people into the proper course of training and ultimately into the general field of work in which they are most likely to succeed. The service is that "Educational and Occupational Information". As the person's future occupation depends to a large extent upon the training received, informational materials concerning training and occupations are often supplementary. He must be helped to choose wisely his study or training if he is to be able to enter and progress satisfactorily in an occupation. Adjustments in training or in work are often necessary as young people make choices they afterwards regret, and adequate informational materials should be available to help them work out their problems.

Perhaps the most familiar service provided in Guidance is that of 'Counselling'. The Cumulative Record Form and Educational and Occupational Information serve the end of counselling. In a face-to-face relationship, the counsellor helps the student understand himself, make his own decisions, and work out his problems. Considerable counselling may be required for students who are undecided or who insist on choosing a course of study which appears completely out of line with their demonstrated abilities and achievements.

In Western countries, the teacher or headmaster may have a number of specialists from whom help can be had for counselling purposes : the school psychologist, the school nurse, the school social worker, the school counsellor, or experts in such fields as remedial reading. In India, these resources are generally not available at present. The time may come, however, when psychological centres may be located in strategic centres to help with the adjustment of children who need specialized help. Whatever the shape of things to come might be with regard to psychological centres for child development and guidance, the responsibilities of the teachers and headmasters will continue.

The great majority of students will not need therapeutic help from the centres but all will be faced with choosing a course of study and an occupation. The teachers will continue their daily contact with such students and will provide the atmosphere in which their study is carried on. The counselling responsibilities of the teacher may extend beyond helping the pupil ; they may include the parents as well. Children need to be accepted ; but their parents may need an understanding of the real abilities and potentialities of their children that will help them accept their offspring without feeling disappointed, resigned, resentful or ashamed.

Another service of Guidance is that of "Placement" both educational and vocational. In addition to help, the individual student may receive from his family and friends in the matter of occupational or vocational placement, there is the added help of the Public Employment Exchange. The pattern in India at present does not include planning for vocational placement by the schools, and this may not be legitimate responsibility of the schools. However, the schools have the full responsibility for educational placement. No other agency in society decides

whether the individual pupil is ready to be advanced to the next class, given double promotion, or held in the same class for a second year.

It is in this service of Placement that the problems of helping students select proper courses and of assessing the achievement of the student meet and are of importance in the Higher Secondary Scheme. External assessment of the student comes at a time after the course has been studied, internal assessment by the school staff should take place previous to the selection of the course of study for guidance purposes. Once the selection has been made, continued assessment will indicate the wisdom of the choice and the probability of meeting successfully the external assessment at the end of the course.

A final service of Guidance is the "Follow up Service". Very often young people meet life's most difficult problems, after they have finished their school work and have entered the world of work. Those who enter college may be fortunate enough to find a Guidance programme in such schools; however, most young people will have no place in which they can find trained counsellors. In the large cities, the Public Employment is providing such help; but it will be some years before such aid becomes generally available. The Follow-up Service is an attempt by the school to help their former students who have passed out in previous years. Counselling is provided and information is available concerning new training opportunities or possible job opportunities.

As a part of the Follow-up Service, the school also evaluates its Guidance programme for the purpose of revising and improving it. If the needs of the student body or of the community have changed, it may be that a change in the curriculum should be made. The evaluation process thus covers not only the past and present phases of the school's Guidance programme, but the process anticipates needed changes both in the Guidance programme and in the teaching programme.

Even as education is not something that suddenly begins, runs a definite course, and then is finished, so guidance is not reserved for a certain age group or for a certain class. Western schools have Guidance throughout the school and college years. Teachers in the youngest classes have responsibilities for developing and maintaining good mental health on the part of their

small pupils. Counselling is carried throughout the various classes. Educational Guidance comes during the middle school years, as does vocational Guidance, and is carried forward. However, such Guidance actually begins in the elementary grades. For example, games on the playground or stories read in class may be designed to arouse the interest of the youngsters in different aspects of the world of work in which some day they will eventually find themselves.

It must not be assumed that guidance has been accepted in Western countries unhesitatingly by the schools. The interest in guidance on the part of the schools has come about largely within the last twenty-five years. There has been, and continues to be, disagreement and argument as to the scope and objectives of guidance in the schools. An examination of several hundred writings by Warters indicates a common agreement on the eleven fundamental points concerning the general principles that underlie guidance. These principles would probably be considered by many headmasters and teachers to be the principles of good teaching.

1. Concern for the student as an individual and as a member of a group.

The focus of the guidance programme is upon the individual and his needs, but at the same time the individual is always considered in his relationships to others of his group. Guidance is concerned with the problems of discipline because it is concerned with the student as he is and as he should be in his relationships both with himself and with others.

2. Individual differences must be recognized and provided for as far as possible.

This principle of Guidance is similar to the same principle that has brought about the Higher Secondary Scheme with its diversified courses of study. The dynamics of guidance are closely tied with the recognition that pupils differ among themselves and also within themselves—not only do pupils differ as a group in ability to learn but each individual differs in the ability to learn different subjects.

3. Concern for the whole student.

Guidance is concerned with the physical well-being and spiritual well-being of the student. It would help him discover those situations in which he can develop himself physically and

mentally. Guidance would help the student avoid those situations which would do harm to his structure of values and spiritual well-being. Guidance considers the individual as a unit, a whole, and its programme of help is based upon this assumption..

4. Guidance is for all students—not just those who are maladjusted. Guidance is preventive and developmental as well as diagnostic and remedial. It assumes that most students are normal, although many may have tensions and problems from time to time.

5. Guidance is concerned chiefly with helping students make their choice and adjustments.

This principle is closely tied with the previous one. Guidance is for students who face the normal problems of normal students. The field of psychotherapeutic help is left to more highly specialized workers than the school personnel who administer the Guidance programme. When necessary, Guidance includes referral to such facilities as psychiatric centres but it does not attempt to provide such services.

6. Counsel is implied but compulsion is not included.

The purpose of Guidance is to help the individual help himself. This end is not achieved if the student feels compelled to act upon the advice or suggestion of the counsellor. The counselling process is one of a mutual examination by student and teacher or counsellor of the various aspects of the difficulty facing the student the resources he can bring to bear upon solving the difficulty, and supporting him after he has himself decided upon a course of action. The counselling process is not the telling to a young person what to do and how to do it.

7. Guidance assists the individual to become progressively more able to help himself.

This principle is akin to the one above. The giving of advice only makes the student more dependent upon the person who is doing the advising. Proper Guidance helps the individual build confidence in his own ability, to gain insight into his problems, decide upon a solution, and carry that decision to an end.

8. Guidance is a gradual and continuous process.

Many problems do not have a sudden origin nor are all problems quickly solved. Poor study habits, for example, may be built up over the years and may take a considerable amount

of guidance help to be set right. Because Guidance is a process as many teachers on the staff as possible should be trained to do counselling work. Pupils passing from class to class and teacher to teacher should be given help by all the teachers the institution has. A ninth standard boy should receive help from his Ninth Standard teachers, not from some teacher he had previously in a lower class.

9. Guidance workers need professional training.

A good untrained counsellor should be expected to make a better counsellor with proper training, even as a good untrained teacher makes a better teacher with proper training. As mentioned at the beginning of the chapter, what is new and different about Guidance as carried out in the schools of Western countries are the newer methods, more systematic approach, and use of psychological tests. Professional training is needed to learn such methods and how to use scientific materials.

10. Organization is needed to make Guidance more effective.

The headmasters need training in Guidance in order to understand the programme and so to organize it within their schools. Guidance will not be a 'process' but will be a haphazard programme carried on with varying degrees of success unless it is carefully and systematically organized.

11. Guidance and instruction are complementary services.

Instruction is more effective when the learning potential of the student is known, and the Guidance programme can furnish this information. On the other hand, vocational guidance is more easily carried out when the student has studied something about the world of work and occupations during his social studies. Properly carried out, Guidance becomes a very integral part of the whole instructional programme. The two interlap and complement each other.

GUIDANCE AS A PART OF THE TEACHER TRAINING PROGRAMME

In India efforts have been made to set up Bureaus of Educational and Vocational Guidance in every State with a Central Bureau of Educational and Vocational Guidance at the Centre. But recently the Central Bureau of Educational and Vocational Guidance has been merged with the Psychological Wing of the N.C.E.R.T. At other places like U.P. a number of posts of the Field Staff of the Bureau have been abolished. This all seems to have been necessitated to curtail the expenses involved in setting up full-fledged separate Bureaus for each and every State. There is no doubt that if full-fledged Bureaus with adequate field staff are set up to provide guidance services to all schools in the country, it would involve a huge expense, which the meagre resources of the country can ill-afford. So if for the time being this Educational and Vocational Guidance forms a part of the training college programme and teachers under training and serving teachers, through in-service training, are provided the necessary skills to carry out the work of the Guidance, it would mean a lot of saving for the country. Of course, this would necessitate the overhauling of the syllabus as

it obtains in the training colleges and training institutions. The syllabus will have to be guidance oriented and topics of practical utility and connected with Guidance will have to be incorporated in the existing syllabus. The time period for training of the teachers being too short, it may not be possible to cover all the topics during the course of the training. So it may be necessary to continue this training programme in the field of guidance even as a part of in-service education. Of course, in the training colleges of the new type *e.g.* Regional Colleges of Education and Kurukshetra pattern of training colleges there will be no difficulty in covering all the topics required for a guidance worker during the course of the training of the teachers. But for training colleges of the traditional type the pre-service training programme will have to be linked up with the in-service training programme. In fact the in-service training programme will have to be a continuation of the pre-service training programme. It would be quite in order if after a pre-service training programme the first certificate of the teacher training is awarded to the trainees followed by a few more training certificates on the bases of in-service training programmes provided afterwards. This will give us an integrated training programme of about 4-5 years' duration comprising pre-service and in-service training. This integrated programme of the pre-service and in-service training will ensure a very comprehensive training programme for our would-be teachers and would certainly raise the level of our teacher training. This arrangement will also mean a huge saving in expenditure with an additional advantage of qualitative improvement of teacher training. An additional advantage of this would be that every teacher would become guidance minded. This would mean, in the days to come, the whole of the staff of a school will be guidance minded and thus the guidance programme would receive a fillip. One of the major hurdles in the way of Guidance movement is, that when one or two guidance minded teachers want to bring improvement in their respective schools, the other members of the staff and sometimes the heads of institutions, not being guidance minded, put obstacles in the way of one or two guidance minded teachers and thus the Guidance movement suffers. Such a situation will not arise when the whole of the staff including the head of the institution are guidance minded. So this scheme of educational and vocational

guidance linked up with teacher training programme could be taken in hand without involving any extra expense and this can run till such time as the country can afford and provide separate institutions for educational and vocational guidance for all the States and for each and every school. The latter is, of course, an ideal situation but looking to the financial resources of the country this ideal position will have to wait.

ORGANIZATION OF A PROGRAMME OF GUIDANCE

In the first chapter we discussed "What, Why and How" of Guidance and stressed the need for starting 'Guidance Centres'. In the following pages an outline of a scheme of the 'Organization of a Programme of Guidance' has been given.

Before we discuss the exact organization of a programme of Guidance, it will be worth-while to consider what we mean exactly by 'Guidance'. The word 'Guidance' is the noun of the verb 'to guide', which means to lead or direct. Unfortunately the literal meaning of the word 'Guidance' is very misleading. In the absence of any other name, we retain it but at the same time we qualify it and elaborate its exact significance as we take it to be. The main thing in guidance is that the subject is not taken as a passive individual but as an active, self-directing person. The emphasis is not on guidance but on the individual. The guidance expert or the counsellor does not force his advice on the subject but gives it if the counsellor needs it. So guidance is to help the individual, if he so desires, to make decisions about himself, to provide the necessary facilities and information when sought for. The main emphasis is to be on

self direction. And the job of the person responsible for guidance is to see that the subject has acquired the ability to direct himself. Such a guidance has been classified by some into Civic Guidance; Social Guidance; Health Guidance; Recreational Guidance; Religious Guidance; Leadership Guidance etc. Such a classification may be all right for discussion purposes but otherwise any scheme of classification seems untenable because of the unitary nature of guidance. Of course we are very right in saying that there are various areas that we have to take into consideration while carrying out a programme of guidance. Problems that need solution can arise in any of the following areas :

I. Physical Health—Here a person might need the advice and treatment of a doctor for certain ailments or something like the help of a physical culturist to build up the physique.

II. Home Conditions—Here again there can be many sorts of problems. For example, problems regarding the following :

1. *Accommodation and hygiene*: There might be overcrowding or other unhygienic conditions. There might be scarcity of water or poor sanitation etc.

2. *Family relationships*: The relationships between the various members of the family might be strained e.g. constant quarrels between the father and the mother might become a cause for the neglect of the child and thus make the child a problem one. Jealousy among various siblings in the family may be another factor in the home environments which may become a potent cause of maladjustment. Maltreatment etc. by elders might be another factor that needs to be solved.

3. *Non-cooperation of the home with the school*: This might lead to certain behaviour problems in the child.

III. Leisure Time—The person might need a guidance in this direction because of not knowing as to how to spend leisure. He might here need to be guided in sports, games and hobbies.

IV. Personality Difficulties—Just as physical health can become a serious cause of maladjustment, similarly personality difficulties like sensitiveness, shyness, lack of self-confidence, inferiority complex and emotional instability etc. can become

very important causes of maladjustment and therefore, need a very competent guidance.

V. School Conditions—Here we include the inter-relationship of the students, teachers and other members of the school. Frictions between the various members of the staff are likely to affect the work of the school adversely. Thus the teachers might need guidance as to how to maintain healthy relationships with others. Then, there might be difficulties that the child experiences in the various parts of the syllabi. The child might feel difficulty in progressing in the various educational, social, physical and recreational activities of the school, and hence may need guidance. He may need guidance at the beginning of the term in the selection of the various subjects for his study.

VI. Vocational—In this area the person might need guidance for the choice of a profession or might need guidance for the change of a profession or for adequate training for a particular profession. Or, he might feel ill-adjusted in a particular profession and might like to have guidance.

VII. Religious—The person might have certain doubts or a wrong philosophy of life for which he might need guidance.

VIII. Marital—The person might need guidance for the right choice of a partner or he might be married but his married life might be very unhappy and he might need guidance for making his married life a happy one.

IX. Sex Life—Another and a very important area in which a person can need guidance is healthy sex life. Such a guidance is essential for practically all persons above the age of ten plus years.

X. Old Age—Old age brings its own problems. The various organs of the body begin to decline in their strength. The various senses like eyesight, hearing and smell etc. begin to grow feeble day by day. Such an age does need guidance regarding how best to utilise the time, and to maintain the body strength etc.

From the previous discussion about the word guidance and its significance, it follows that guidance is inherent in a school programme. The teachers in a school help students in the choice of their subjects and in the selection of their hobbies and games etc. They help them in solving their difficul-

ties etc. and thus indirectly they are carrying on a programme of guidance. A school which is assisting students in making choices and helps them in getting better adjusted to their environments is indirectly carrying on a programme of guidance. So guidance might be considered as a system of education adopted by the staff of an institution which allows greater freedom to its students in making choices and provides opportunities in getting adjusted. All this would involve the full co-operation of the staff, some guidance personnel and specialists. The teachers of the school are not enough for carrying out the programme of guidance adequately. They can assist, no doubt, but cannot cover all the areas of assistance. For example, there will be areas where the specialists' help would be absolutely necessary. Cases of maladjusted children might need the services of a doctor, a psychologist, a social worker or a psychometrician etc. So a special personnel would be needed to supplement the work of the teaching staff in the field of guidance. Now looking to the financial conditions of our schools today, it is not possible to have this special personnel for each school separately. That would involve a good deal of expense which seems impossible for an ordinary school to afford. So the best solution would be that a number of schools located in a particular area can join hands and secure the services of the 'special personnel'.

For the organization of a programme of guidance the following scheme is recommended.

1. Institution of a Central Guidance Bureau—One central guidance bureau should be located at some central place in the State and should preferably be attached to some Post-Graduate Training College where facilities by way of psychological apparatus, testing material, books and some staff already exist and also where there is a provision for Master's and Doctoral work in the field of Education and Psychology. Such a bureau would need the following whole-time staff :

(a) *One Director* : He must be a psychologist with considerable experience in guidance, research and teaching, mainly interested in Clinical, Experimental and Educational Psychology. His main job should be to guide research for making the necessary tools for guidance, to arrange courses for the training of counsellors and career masters for the schools. He would control the working of the Regional Guidance Bureaus.

(b) *Research Assistants* : They should be advanced students of psychology or education either M.A.'s in Psychology or M.Ed.'s, who would take up some specific problem for research under the guidance of the Director.

(c) *Statistical Assistant* : He must be qualified as a statistician and must have obtained experience in statistical work in Education and Psychology.

(d) *Social Work Assistants* : These social work assistants will work with parents and various community agencies in promoting the general welfare of the student. They will collect data concerning the home and school environments of the child. They must be trained as social workers at an institution like the 'Tata Institute of Social Sciences', Bombay, or the Delhi School of Social Work or any other such institution. They must be trained in the technique of visiting and of securing information that is reliable. A social worker has generally to go out with the problems referred to him and he has to find out the various causes in the environments of the child which are responsible for creating a particular problem in the child. In the Central Guidance Bureau, his main function will be helping in the collection of out-of-door data for research purposes.

The main functions of this bureau may be briefly mentioned as follows :—

1. To compile and publish in co-operation with other agencies concerned, occupational information relating to the education and training necessary for employment in various jobs and the facilities available etc., information relating to short term and long term requirements of man-power in various trades, occupations, industries, etc., collecting information available for students.

2. To control the working of the Regional Guidance Centres.

3. To standardize various types of tests e.g. personality, intelligence, aptitudes, special abilities, interests, etc. for use at the Central and Regional Bureaus.

4. To conduct job analysis studies.

5. To devise adequate cumulative record forms to be used in various types of institutions.

6. To assist through the regional bureaus the various

educational institutions in the State in framing their own guidance programmes.

7. To serve as clearing house of ideas and information to the Regional Bureaus and to co-ordinate their work and research.

2. Institution of Regional Guidance Bureaus—They would be directly under the Central Guidance Bureau and each one would be managed by an Assistant Director and a number of Counsellors. The main function of these Regional Guidance Bureaus will be to look to guidance needs of all the schools located in their respective regions. The various Post-Graduate Training Colleges in the Punjab will be the ideal places for locating these Regional Guidance Bureaus because some of them have already started a programme of guidance in their nearby schools. With a little more assistance they can easily start functioning as Regional Guidance Bureaus. The following is the staff suggested for the Regional Guidance Bureau :

(a) *Assistant Director* : He must be a psychologist with a considerable experience in guidance and teaching. He should be at least M.A. in Psychology or M.Ed. with a good research experience. He should be responsible for the guidance of the students in the schools situated in his own region.

(b) *Counsellors* : The counsellors should be responsible for the adjustment of the individual pupils. The duties of a counsellor should be making personal contacts with parents, teachers and other agencies in connection with the adjustment and development of its wards in the various schools in his region. He would help his wards in the healthy development of their personalities. The counsellors should be incharge of the guidance programmes in the schools in their jurisdiction. Different counsellors should have obtained training for different areas of guidance e.g. emotional, educational and vocational etc. And all these counsellors should co-ordinate to carry out a programme of guidance. The qualifications necessary for a counsellor should be that he should have obtained a Master's degree in Education with Vocational and Educational Guidance as one of his options. He should be in possession of the necessary personality qualities like sympathetic attitude, sincerity and emotional stability etc.

3. Institution of Guidance Centres in the Schools—The

teachers in schools who have had M.Ed. degrees or have undergone a specialised training in the field of guidance could be relieved of some of their teaching load and could be entrusted with the working of the school guidance centres.

Besides the above-mentioned personnel, a clerk-typist, peons and a daftary would form a necessary part of the personnel of each of the Central, Regional and School Guidance Centres, as is the case in every form of organisation.

Extent of Guidance Services in India

For the sake of study we may classify the schools into the following types as far as their guidance programme goes :—

Type A Schools : Schools offering a guidance programme under the charge of either a School Counsellor, Teacher-Counsellor or Career Master/Mistress.

Type B Schools : Schools having no trained guidance workers but carrying on some sort of rudimentary guidance activity, such as maintenance of occupational information materials and/or Cumulative Record Cards.

Type C Schools : Schools which had no guidance activities of any sort.

***State-wise Distribution of Schools Reporting Different Types of Guidance Service**

State or Territory	Number of Schools			Percent of Schools Reporting	A	B
	A	B	C			
Andhra Pradesh	19	3	6	1270	67.9	10.7
Assam	—	—	442	17	0.0	0.0
Bihar	51	46	174	1380	13.7	12.4
Gujarat	174	274	247	105	25.0	39.4
Jammu & Kashmir	5	13	80	59	5.1	13.3
Kerala	—	—	—	869	—	—
Madhya Pradesh	21	50	87	420	13.3	31.6
Madras	—	—	—	1066	—	—
Maharashtra	258	12	10	1720	92.1	4.3
Mysore	84	53	462	89	14.0	8.8
Orissa	42	66	110	97	19.3	30.3
Punjab	42	113	393	776	7.7	20.6
Rajasthan	14	95	64	295	8.1	54.9
Uttar Pradesh	50	2	76	1478	39.1	1.6
West Bengal	71	8	9	1710	80.7	9.1
Andaman-Nicobar	—	—	—	2	—	—
Delhi	27	61	95	67	14.8	33.3
Himachal Pradesh	—	—	—	68	—	—
Manipur	—	1	6	49	—	14.3
Pondicherry	1	1	19	9	4.8	4.8
Tripura	1	5	5	19	9.1	45.5

*Mehta Perin H. & Kanade H.M., A Survey of School Guidance Services, p. 5, Table 2, April, 1963.

Guidance Personnel Working in Schools in India

There are three types of guidance personnel working in schools in India—the Career Master/Mistress, the Teacher-counsellor and the Counsellor or School Counsellor or School Psychologist. *Career Master/Mistress* is a trained graduate teacher who has received atleast three weeks' special training in guidance. He is primarily a teacher but is relieved of a small amount of his teaching load. He or she generally maintains an occupational Record Card with the help of class-teachers.

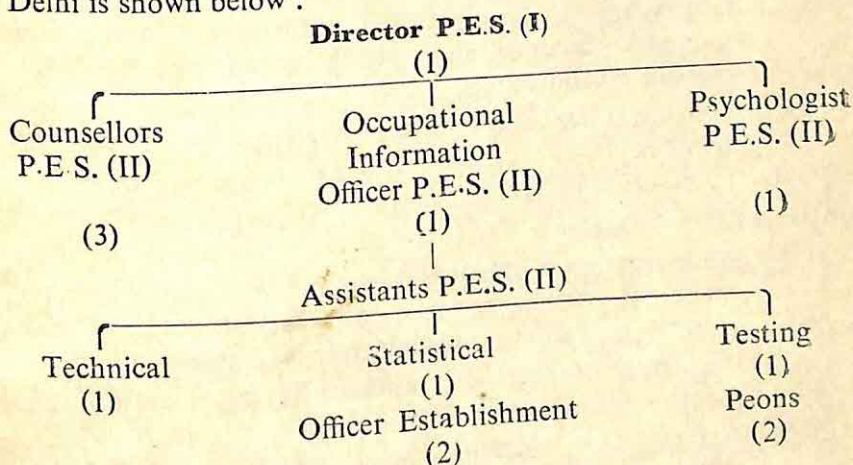
Teacher-Counsellor—He is a trained graduate teacher or a psychologist who has received special training in guidance of nine months' duration. He is a full-time worker in the field of guidance.

District Counsellor/School Counsellor/School Psychologist

He is a whole-time worker and is generally M.A. or M.Ed. or both and may have undergone a special training in guidance for a period of about nine months.

State Bureaus of Educational and Vocational Guidance

The minimum staff considered necessary for the successful working of a State Bureau as laid down in Appendix No. 1 of the communication No. F. 19/62-S.F. I, dated Feb. 22, 1962 from the Ministry of Education, Government of India, New Delhi is shown below :



QUALIFICATIONS OF THE STAFF

The Director—The Director should be a person of the rank of a professor with Ph. D. in Psychology and experience in

clinical work, educational administration, educational and Psychological research particularly in the field of guidance and counselling. His main job is organisation, administration, directing and conducting of research in the field of Guidance and Counselling.

The Counsellor, Psychologist or Technical Assistant—

He should be a person who should at least be M.A. in Psychology or M.Ed. with Educational and Vocational Guidance and must have undergone a training for at least a duration of one year in the field of guidance and counselling.

Duties of Counsellor

1. The training of guidance personnel for the schools in the State.
2. Organising short courses in Educational and Vocational Guidance for teachers.
3. Promoting guidance movement through publication of suitable literature in the regional languages for the use of teachers and parents.
4. Collection, classification and dissemination of Occupational Information.
5. To provide testing and counselling services to local and mofussil schools.
6. Supervision of guidance services in the State.
7. Displaying of Occupational Information and other guidance material and setting up of a library at the Bureau Headquarters.
8. Visits to other States for comparative study of guidance services.
9. To conduct research.

Duties of Psychologist

1. Standardization of psychological tests for the measurement of intelligence and aptitudes of students and collection of data according to local conditions.
2. Preparing of tools of guidance in coordination with Central Bureau and other agencies.
3. Training of guidance personnel for administering different types of tests.
4. Testing and counselling services to students in local mofussil schools.

5. Preparation and publication of literature in connection with tests for the use of teachers and parents.
6. Setting up of a library of testing material at the Bureau Headquarters.
7. Research work in general.

Duties of Senior Assistant Counsellor

1. The training of guidance personnel for the schools in the States.
2. Organizing short courses in Educational and Vocational Guidance for the teachers.
3. Promoting Guidance movement through publication of suitable literature in the regional languages for the use of teachers and parents.
4. Collection, classification and dissemination of Occupational Information.
5. Testing and counselling services to local and mofussil schools.
6. Supervision of guidance services in the State.
7. Displaying of Occupational Information material and other allied guidance material and setting up of a library at the Bureau Headquarters.
8. Visits to other States for comparative study of guidance services.
9. Research work in general.

Occupational Information Officer

The person should be at least M.A. or M.Ed. with Educational and Vocational Guidance and should have gained some experience in the field of Occupational Information. His main duties are as follows :

1. To set up an Occupational Information Centre at the State level.
2. To supervise the setting up and development of the Occupational Information Centres at the District levels.
3. To collect and disseminate Occupational Information material in the State through the agency of District Occupational Information Centres.
4. To publish literature connected with Occupational

Information for the use of Occupational Information Centres in the Districts and High and Higher Secondary schools.

5. To conduct research in the area of Occupational Information and its dissemination.

Duties of Technical Assistant (Testing)

1. Full co-operation and assistance to Psychologist.
2. Testing and Counselling Services to local and mofussil schools.
3. Incharge of library of Testing Material Section.
4. Collection and classification of data for the standardization of Psychological Tests.
5. Collection and classification of data for Research work.
6. Any other work necessary for the development of the Bureau.

Duties of Technical Assistant (General)

1. Full cooperation and assistance to Senior Assistant Counsellor.
2. Collection and classification of Occupational Information.
3. Testing and Counselling Services to local and mofussil institutions.
4. Displaying of occupational information in the Library and Reading Room.
5. Incharge of Library of Occupational Information Section.
6. Collection and classification of data in Research work.
7. Visits to High, Higher Secondary Schools for supervision.
8. Any other work necessary for the development of the Bureau.

Duties of an Assistant Guidance Counsellor

1. To maintain an Information Corner at the Distt. Headquarter and also to make this information available to schools wherever required.
2. To help the schools in introducing Cumulative Record Cards through Career Masters and School Assistant Counsellors.

3. To help the schools in setting up Occupational Information Centres or Corners through Career Masters or School Assistant Counsellors.
4. To arrange Career talks in schools through Career Master or Assistant Counsellors.
5. To arrange Career Conferences once a year in the Higher Secondary Schools.
6. To carry out Test Administration in the schools.
7. To take up simple individual cases from schools for Counselling.
8. To take up any other assignment given by the Bureau.
9. To take up any other work in the field of Educational and Vocational Guidance and Counselling at their initiative but with the approval of the Director, State Bureau of Educational and Vocational Guidance.

Duties and Responsibilities of the School Counsellors

1. Explain Guidance point of view to all the members of the School faculty and parents, and introduce Guidance Programme in the school with their active cooperation.
2. Set up an Educational and Occupational Information Centre/Corner in the School.
3. Give orientation talks to the pupils regarding the Guidance Services available in the School.
4. Collect, classify and file Educational and Occupational Information.
5. Disseminate Educational and Occupational Information through
 - (a) Career Talks
 - (b) Group Talks
 - (c) Display on Bulletin Boards
 - (d) Film Shows
 - (e) Career Days
 - (f) Career Weeks
 - (g) Career Conferences
 - (h) Career Talks by Experts
 - (i) Plant Tours, etc. etc.

6. Introduce Cumulative Record Cards for classes 6th to 11th and get them maintained with the cooperation of other members of the faculty.
7. Administer various Psychological Tests.
8. Provide Counselling Services to the pupils of his/her school, and also cater to the similar needs of other local Higher Secondary Schools, if so requested.
9. Conduct Research Projects relating to the fields of Educational, Vocational and Personal Guidance in the Multipurpose Higher Secondary Schools. These projects must be got approved by the Director, State Bureau of Educational and Vocational Guidance.
10. Conduct such Research Projects as are assigned by the Director, State Bureau of Educational and Vocational Guidance.

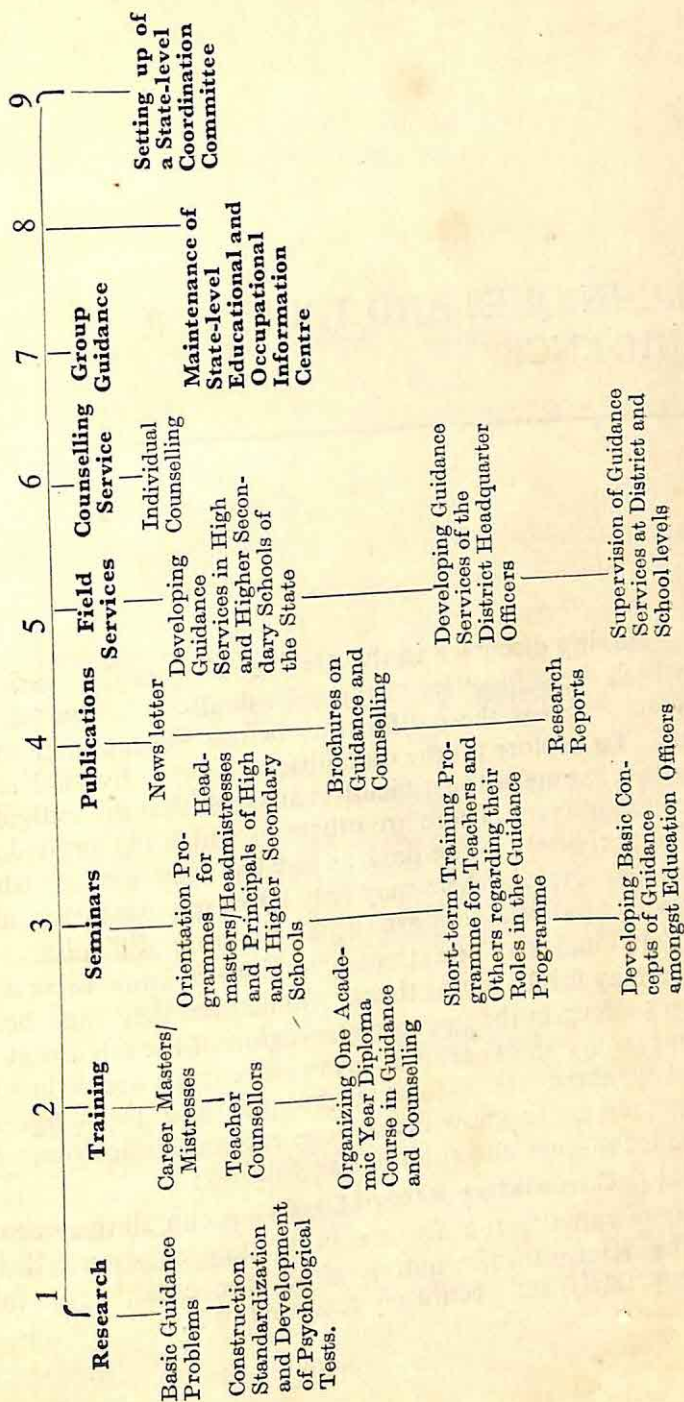
Duties of a Career Master/Mistress

1. Explain guidance point of view to all the members of the school faculty and parents, and introduce Guidance Programme in the school with their active cooperation.
2. Set up an Educational and Vocational Information Centre/Corner in the School.
3. Collect, classify and file Educational and Occupational Information.
4. Disseminate Educational and Occupational Information through :
 - (i) Career Talks
 - (ii) Group Talks
 - (iii) Display on Bulletin Boards
 - (iv) Film Shows
 - (v) Career Days
 - (vi) Career Weeks
 - (vii) Career Conferences
 - (viii) Career Talks by Experts
 - (ix) Plant Tours, etc. etc.
5. Introduce Cumulative Record Cards and get them maintained with co-operation of other members of the faculty.

The Functions of the State Bureau and Its Staff

The functions of the Bureau are outlined as given on the next page.-

Functions of the State Bureau of Educational and Vocational Guidance



TECHNIQUES AND TOOLS FOR GUIDANCE

Having discussed in the previous chapter the various areas in which the difficulties of the individual can lie, we have to see how to diagnose these difficulties before we can offer any guidance. To explore all the difficulties of an individual is not an easy task. Some of the difficulties are such that the individual likes to communicate. There are others of which the individual himself is absolutely in the dark as to what they are or what their nature is. He or others may only know of some over abnormal behaviour patterns that are caused by those difficulties. Though the individual may be extremely anxious to know these difficulties yet he may fail to locate them. Sometimes they may be buried down so deep in the unconscious region of the mind that locating them even by an expert may mean searching a needle in a hayrick. Anyway there are various techniques and tools by which an expert can get to know the various areas of difficulties. Some of these techniques and tools are as follows :

1. **Cumulative Record Cards**—A cumulative record card is a very valuable tool for use in guiding children. It contains all the relevant information about the child, very faithfully, appropriately and accurately recorded in it.

There are many kinds of cumulative record forms in use, but the following is a very simple one and can conveniently be adapted by schools for their own use.

Folder : This Cumulative Record was devised by Dr. C. W. Riddle in consultation with Prof. Uday Shanker and Dr. N. L. Dosajh.

Birth Date..... Birth Place.....
 Home Address.....

 Schools Previously Attended : Date.....

(Dated pictures)

Fee Concession and/or
 Stipends Received Date.....

 If retarded, why.....

Information Concerning Family Members

Father/Guardian :

Name..... Occupation(s).....

 Education.....
 Other Information.....

Mother :

Name..... Occupation(s).....

 Education.....
 Other Information.....

 Occupation(s) of relatives.....
 Other family information.....

 Sibling.....
 Admitted to Class..... School.....

Information Concerning Health*Date of Last Examination**Summary of Findings
and Treatment*

Hearing

Heart

Eyes : Sight

Lids

Blood Anemo

Malaria

Lung Condition

Vaccination

Inoculation

Other Medical Examinations

Physical Abnormalities

Information Concerning Counselling Received

Date

Counsellor

Purpose

Summary

Serial No..... Name..... Sex.....

Admission No..... Admission Date.....

Information Concerning Staff Evaluation of Personality Factors

<i>Factors</i>	<i>Sixth</i>	<i>Seventh</i>	<i>Eighth</i>	<i>Ninth</i>	<i>Tenth</i>	<i>—</i>
Dependability	P Av S	P Av S	P Av S	P Av S	P Av S	P Av S
Honesty	P Av S	P Av S	P Av S	P Av S	P Av S	P Av S
Accuracy	P Av S	P Av S	P Av S	P Av S	P Av S	P Av S
Personal Habits	P Av S	P Av S	P Av S	P Av S	P Av S	P Av S
Leadership	P Av S	P Av S	P Av S	P Av S	P Av S	P Av S
Study Habits	P Av S	P Av S	P Av S	P Av S	P Av S	P Av S
Promptness	P Av S	P Av S	P Av S	P Av S	P Av S	P Av S
Co-operativeness	P Av S	P Av S	P Av S	P Av S	P Av S	P Av S
Self-confidence	P Av S	P Av S	P Av S	P Av S	P Av S	P Av S

Information Concerning Test Results

Date _____ Class _____ Name of Test _____

Guidance Services Check List

	<i>Sixth</i>	<i>Seventh</i>	<i>Eighth</i>	<i>Ninth</i>	<i>Tenth</i>
Occupational Information					
Group Guidance					
Individual Counselling					
Educational Information					
Group Guidance					
Individual Counselling					
Yearly Counselling Conference					
Consultation with parents					
Interest Inventory.					

Information From Other Institutions*

*List name and address of institutions and give summary of reports with dates.

ACADEMIC RECORD

[illegible]

THE CUMULATIVE RECORD FOLDER

The Cumulative Record Folder should bring together in one place information from such different school sources as the Attendance Record, the Marks Book, the Medical Records (if any) and the like. If the record be in the form of a folder, the summary materials will be written in the proper spaces on inside and outside covers. In addition to the summary materials, the folder may contain any amount of valuable information; as notations made during counselling periods with the student, reports on misconduct which may or may not be put into the permanent Cumulative Record Folder, and other recordings in loose form and on separate sheets. Such sheets can be filed in the folder.

The Cumulative Record Form or Folder has come from the Western countries. There are considerable differences between the situation in the schools in those countries and in Indian schools. This is not to decry or criticise the schools in this country; but it is necessary to recognize that what is done in the United States, for example, may need considerable adaptation before it can be useful in India. Such is the case with the Cumulative Record Form.

Western text books generally recommend the recording of everything about the student that pertains to his background, abilities, achievements, interests, and the like. Valuable though this may be, the teacher's experience in Indian schools does not lead him to suggest such extensive recording. For the present time, we would do well to make several assumptions:

1. Teachers generally have classes which are too large for the teacher to give as much time as he or she might like to give to the individual student.
2. Teachers in India do not have the time, nor would they take the time, to fill in an extensive and exhaustive Cumulative Record Form or Folder.
3. Such an extensive Cumulative Record Form is usually not necessary as psychotherapeutic work will not be carried out with most students, their problems often being lack of adequate social-educational-occupational information rather than deep-seated psychological disturbances.

4. For the present, a minimum of information should be carefully recorded and evaluated by persons having had some training in the use and interpretation of Cumulative Record Forms.

The information given in summary form about the individual student and his relationships with school personnel should help the headmaster or school counsellor :

1. To evaluate the student's various potentialities, limitations, and achievements—both mental and physical.
2. To evaluate the personality factors of the student as judged by school personnel.
3. To evaluate the practical opportunities of the student probably he has with regard to future training and work possibilities.
4. To check on the amount and/or type of guidance help given to the student during his school years.

There are other values of a well-organised Cumulative Record Form for the alert headmaster. These include :

1. Help in evaluating the teaching ability of his teachers.
2. Help in evaluating the ability of his teachers in examining and marking students.
3. Help in evaluating the interest his teachers take in teaching and in understanding their students.

NOTES ON SUGGESTED CUMULATIVE RECORD FOLDER

Page One

Name : The name is placed at the side so it will be in a position to be at the top of the inside of the folder. If this back inner side be a half-inch higher than the front side, the name will appear when the folder is filed.

Sex : The chief value of indicating the sex with an "M" or "F" may be more for use in separating a large number of folders into the respective piles of male students and female students. Generally the Indian name also indicates the sex of the student, but one letter of the alphabet is easier to see and comprehend quickly than a full name.

Birth Date : Care should be taken to see that this is absolutely accurate.

Admission Number : This may not be the proper name for the number given to the student when he is admitted to the school. A number should be used, however, as an aid in rapid filing.

Name of School : Economic reasons suggest that the folder be printed in large enough quantities for use by a number of schools. Also, the time may come when the Cumulative Record Folder may follow the student from one school to another or to college.

Pictures : These should have the date when taken written directly below them. Two are recommended as facial features of growing children change—one at the end of the Eighth Standard and the other at the time of leaving school.

The following need little comment :

Home Address

Place of Birth

Registry Date (in this particular school)

Registry Book No. (of this particular school)

Schools previously attended

If retarded scholastically, why : The reason or reasons given should be brief and clear. Additional explanation may be given on the back of the folder if useful.

Source of verifying date of birth and place : This item is to help the headmaster with the problem of changing dates of birth for students who claim theirs is wrongly registered in the school records.

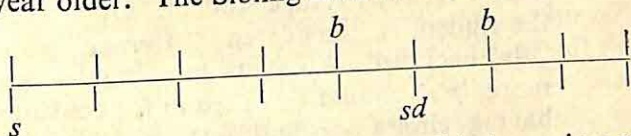
Father/Guardian : The occupation gives an idea of the possible vocations open to the student. The education gained gives an idea of the probable sympathy and understanding the parents will take in the student's studies.

Mother : The purposes for securing the information concerning her education and the vocation of her family are much the same as those for Father/Guardian.

Siblings : The Sibling Line is used rather than listing the birth dates of the various brothers and sisters. The important thing to know about the student's siblings is whether he has any or not and, if so, how much

younger or older are they than he. The marks on the line denote one-year spacings. An "X" can be put at any place on the line to indicate the individual student. To the left of the "X" put the younger siblings ; to the right put the older. Brothers should be marked above the line with a "b" and sisters should be marked below the line with an "s". Dead siblings should be indicated with a "d" placed beside the "b" or "s".

A boy has one brother 2 years older, and two sisters, one 4 years younger and one now dead who was 1 year older. The Sibling Line would appear :



Occupations of Older Siblings and Relatives : This item gives more of an idea of the vocations in which the student may hope to benefit from contacts and friendships made by members of his family.

Information Concerning Health : This section is to provide a check list as to whether or not any possible difficulty in the student's work might be due to the more common ailments that have not been diagnosed in a physical examination. It is based on the assumption that many students do not have adequate physical examinations.

Information as to Counselling Periods : This provides a check list to enable the headmaster know whether the student has received counselling, the student's needs for counselling, and the results of the counselling process. More complete notes may be filed in loose form in the Folder ; this space is for a summary of each counselling period only. The summaries may be extended to the back of the folder if the space is not sufficient.

Information from Other Institutions : While this may have little use at present, it anticipates a growth in the counselling services available for students in Indian society.

Page Two

Information Concerning Staff Evaluations of Personal Factors : In many cumulative records this section proves to be

a difficult job. The form used in this Cumulative Record Folder is based on the assumption that most students are "average" with respect to the various factors listed.

Two reports a year should be had from the student's teachers on these same factors and the results summarized in this Folder. Those factors should be indicated with a circle around the "F" in which some teachers consider the student to have a "problem". Those factors should be indicated with a circle around the "E" in which some teachers consider the student to be "excelling" over the average student. Other factors in which the student is considered "Average" should have the "Av" encircled. Students have circles around one or more "p's" should be called in for consultation. Those having circles around one or more "E's" can be recommended by the school for those factors when recommendations would be helpful.

Information Concerning Test Results : "Standard" means the standard in which the student is studying when the test was administered. "Norms Used" refers to the set of norms used for converting the Raw Score to the Percentile Score ; norms worked out for students in Bombay may vary considerably from norms worked out for students in Kashmir or different tests.

Personality tests and Interest Inventories may require more space than is allowed on the Folder to record results in their different sections. Additional information may be included in loose form or written on the back of the Folder.

"Scholastic Potentiality" is that portion of intelligence in which schools with an academic bent are more likely to be interested. The term is used rather than "Intelligence Tests". If the intelligence tests administered have two areas—the Verbal and the Non-Verbal—both scores should be recorded together with their Percentile Score.

Guidance Services Check List : This serves as a reminder and an inventory sheet for the school staff to check for determining whether the student has received all the

guidance services available for him in the school. "Group Guidance" refers to guidance given to the student as a member of a group—as, Vocations Days Programmes, audio-visual programmes on various occupations, distribution of informational materials to classes, etc. "Consultation with the parents" is desirable but not always possible. Other services may be listed as they come into the school's guidance programme.

Page Three

Academic Record : Three unmarked columns have been included.

These are for use in recording academic achievement in the Eleventh Standard and for such standards as the student may have to repeat.

Each Standard has two spaces, one for recording the Total Marks secured out of the total possible, and the other for recording the Rank of the student in his class.

For Example : If four tests are given during an academic year and the student makes a total of 288 points out of a possible 400, in the Total Marks column it should be written 288/400.

If the same student stands 20th out of a class of 51 students, it should be written in the Class Rank column as 20/51.

A cumulative record of the above type should be introduced in practically every high school. This will go a long way in placing the guidance programme on a more scientific basis and will be a good step towards starting an organised programme of guidance without incurring any extra expenditure.

1. Interview : Interview is a very important technique in guidance. In fact, all sorts of guidance implies interviewing. The various steps for conducting the interview are as follows :

(a) *Preparation for the interview* : The interviewee must feel the need for an interview. Before an interview is arranged, he must feel that he has some problem for which he needs a solution. The place and atmosphere where the interview is carried on must be free from all sorts of noises and the room must be comfortable, orderly and apart. There should be no

element of haste but sufficient time should be scheduled for the purpose. Ordinarily the interview should not be interrupted. The interviewer should keep all the necessary material at hand.

(b) *Conduct of the interview* : The interview must be conducted in a friendly spirit. Some of the questions may be pre-planned but the others will have to be thought out at the spur of the moment, according to the exigencies of the situation. No rule can be laid down as to the total time to be devoted to the interview. One interview may be enough or a number of interviews may be necessary. The first step in interviewing is the establishment of rapport which means inculcating feelings of friendliness, security and mutual confidence. A few words of friendliness or a cup of tea or coffee or some other gesture of friendliness may be quite enough to succeed in establishing a rapport. The interviewers should not show signs of fatigue, bad temper and restlessness. The interview should be started with something pleasant, may be talking about the achievements of the interviewee and gradually it should lead to exploring the problems of the interviewee. The purpose of the interview must be understood beforehand and, keeping in view the purpose, the interview should be kept controlled. Every now and then effort should be made to relieve the tension—just a temporary shift in the conversation or spontaneous laughter can go a long way in relieving the tension. Moralising tone or a tone of disapproval or a word that lowers the self-respect of the interviewee should be avoided. The whole attitude should be that of trying to understand the point of view of the interviewee. The interviewee should try to create an atmosphere which helps the interviewee to solve his own problems, enables him to think out and helps him to achieve a normal behaviour. The interview should be ended very tactfully. The interviewee should leave the interview room with a sense of satisfaction. The main points of the interview should either be jotted at the spot or may be written immediately after the interview is over.

2. **Counselling and Guidance** : Counselling and guidance are very important techniques. Counselling is a process of developing in the counsellee self-confidence and strength of character so as to enable him to tackle his problems himself more effectively. In this technique the counsellor develops a friendly attitude towards the counsellee and encourages him to

discuss his problems. The counsellor collects information about the counsellee and about his environments and reviews it in such a way as to aid him in reaching solutions in his different kinds of problems. A counsellor begins somewhat non-directively and uses tests only when necessary. The tests only provide data as far as they help the counsellee in arriving at his own conclusions.

VARIOUS COUNSELLING CONCEPTS

1. Non-directive Counselling : In this method it is the subject, who first feels the necessity of a counselling situation and it is he who contacts the counsellor for a counselling situation in which the subject is enabled to solve his own problems. The whole situation is left unstructured by the counsellor and he merely directs the subject in arriving at his own conclusions of his problems. It is the subject who does most of the talking, the counsellor mostly listening and directing thinking process of the counsellee. It is the writer's experience that a non-directive counselling is immensely helpful when the subject is faced with certain emotional difficulties.

2. Directive Counselling : In this method the counsellor takes the role of an advisor. He is supposed to have a lot of experience and a fund of information, which he imparts to the counsellee who lacks that information.

3. Eclectic Approach If the question is raised which method-Non-directive or Directive should be followed by the counsellor for counselling purposes, the answer is self-evident. It is not a question of the one or the other. Both methods have their own place. Sometimes the counsellor should adopt the non directive method and at another time directive approach may be more useful. If the client has a problem which concerns primarily his emotional life, a non-directive technique is indicated but when the client has a problem because of lack of information, a directive counselling will be the solution.

Guidance on the other hand suggests a rather directive approach. It is more often mere telling or the giving of advice. Most of the teachers merely give guidance to their pupils mostly in the subjects in which they possess more information. Whereas counselling is a highly technical job, guidance alone can be given by any one who possesses a good deal of information on the topic in question. That is why a counsellor is a highly trained

individual and possesses certain personality traits which differentiate him from ordinary persons. A number of studies have been conducted to outline the general characteristics of a successful counsellor, but there is not much agreement between them. So it is not very easy to lay down some general characteristics of a successful counsellor, but there is not much agreement between them. So it is not very easy to lay down some general characteristics of a successful counsellor. The best that we can do is to mention two of the important studies on this topic :

**(i) Characteristics as listed by Bailey :*

In addition to being endowed with personal qualities essential for all educators (fairness, sincerity, social culture, health etc.), the counsellor should conspicuously exhibit (1) a sympathetic understanding of youth, (2) emotional stability, (3) approachability, (4) broad scope of knowledge and interests, and (5) good judgment and commonsense.

**(ii) Characteristics Revealed in the Study by Cox :*

Cox studied a series of case studies of one hundred successful counsellors. This study gives quite an accurate picture of the successful counsellor. The following is the list of personal characteristics as revealed in the study by Cox : Fairness, Sincerity ; 'Personality' ; Good character and wholesome philosophy ; Commonsense ; Health ; Emotional Stability ; Approachability ; Friendliness ; Ability to get along with people ; Sympathetic understanding of youth ; Interest from himself ; Flexibility and adaptability ; Intelligence ; Mental alertness ; Social Culture ; Broad knowledge and interests ; Leadership ; Awareness of one's own limitations ; Professional attitude ; Sense of mission ; Interest in guidance and personnel work ; Understanding of classroom conditions ; Understanding of working conditions ; Understanding of social and economic conditions.

4. Testing. Tests are other very important tools which are absolutely imperative for a programme of guidance. They help us to understand the children more objectively and accurately. For proper guidance they are extremely useful for furnishing the counsellor with reliable data about the counsellee. The tests can be divided in various ways but a simple classifica-

tion is as follows :

- (i) Tests of General Intelligence
- (ii) Achievement Tests
- (iii) Aptitude Tests
- (iv) Tests of Interests
- (v) Personal Adjustment Tests
- (vi) Personality Inventories and Tests.

Let us now discuss each of these under separate heads. Examples of tests will be cited wherever possible. The number of tests that are being used in foreign countries is so large that it is not possible to mention them all here. Only tests that have been either standardised in India or have the possibility of being standardised in India will be mentioned. A note of warning must be sounded regarding the indiscriminate use of tests. We cannot accept the foreign tests and their norms as such. Each test has a meaning for a particular population and culture. For our own culture we have to adapt some of the foreign tests and have to prepare our own norms. And also we have to devise some new norms. And also we have to devise some new tests suited to our conditions. Attempts in both these directions have been made in our country, but they are too few. We need to do more work in this direction before we can launch upon an absolutely scientific method for guidance. Till then we have to carry on with whatever we have.

Before a test is administered it must fulfil the following absolutely necessary conditions :

1. The test situation must be standardised. There should be definite instructions.

2. The scoring procedure should be standardized so that the personal opinion of the tester should not come in. Or in other words the scoring procedure should be absolutely objective.

3. Local norms for the test must be available, because it is only with reference to the norms that any child's goodness or poorness of performance can be judged.

4. The test must be reliable and valid. By reliability, we mean that the test on subsequent readministrations must give practically the same score. And by validity is meant that the test measures what it purports to measure and not something else.

5. The test must be easy to procure, to apply and to score. It should demand less training and experience on the part of the tester.

6. It should not be very lengthy and cumbersome.

7. The score on the test should not be affected by the health and mood of the subjects.

TESTS OF GENERAL INTELLIGENCE

Although intelligence tests have been framed and intelligence is being measured, yet there is no unanimity of opinion regarding the definition of the word intelligence.

The best we can do is to list a few important definitions of intelligence.

William Stern : According to him "Intelligence is the capacity to adapt oneself to new problems and conditions of life."

Sir Cyril Burt : "Intelligence is inborn, all round efficiency."

Alfred Binet : "Intelligence is judgment or commonsense, initiative, the ability to adapt ourselves, to judge well, understand well, reason well."

Terman : "An individual is intelligent in proportion as he is able to carry on abstract thinking."

Van Wagenen : "Intelligence is the capacity to learn and to adjust to relatively new and changing conditions."

Freeman : "Intelligence is represented in behaviour by the capacity of the individual to adjust himself to new situations, to solve new problems, to learn."

Boynton : "Intelligence is an inherited capacity of the individual which is manifested through his ability to adapt to and reconstruct the factors of his environment in accordance with the most fundamental needs of himself and his group."

Spearman : According to him every intellectual task involves two factors—a general factor which is designated as (g) and is the same for the same individual in all the activities that the individual performs. Then there are several specific factors S. Any intellectual task involves the operation of the general (g) factor and several specific factors ($S_1, S_2, S_3, \dots$). This general factor (g) he calls as general intelligence and according to him it

is a sort of mental energy which is involved in various degrees in various tasks.

Thorndike : He recognised three kinds of intelligence ; namely, abstract, mechanical, and social. And according to him intelligence is the power of good responses.

Thurstone : He has advanced the "factorial analysis" theory, according to which intelligence consists of several abilities, seven of these abilities have been determined and the rest of them will be added to the list when more thorough analysis is carried out. The seven abilities are :

(i) Number facility, (ii) Word fluency, (iii) Visualizing, (iv) Memory, (v) Perceptual speed, (vi) Induction and (vii) Verbal reasoning.

During the early stages of psychological testing I.Q. was used as a measure of an individual's intelligence. I.Q. means intelligence quotient. It is calculated with the help of the formula $I.Q. = \frac{M.A.}{C.A.} \times 100$ where M.A. stands for mental age as determined by intelligence tests and C.A. means the chronological age in years.

In 1930 it was realized that one score did not give full idea about the intellectual capacity of an individual. Since then, multiple-score tests of intelligence have been developed. Today intelligence is supposed to consist of different component abilities basic to learning, which are independent of one another. They are as follows :

- *1. Verbal intelligence.
2. Reasoning intelligence.
3. Numerical intelligence.
4. Fluency intelligence.
5. Memory intelligence.
6. Visualization intelligence.
7. Perceptual intelligence.
8. Co-ordination intelligence.

Intelligence tests are extremely useful for guidance purposes. Students should be made to make educational and vocational choices according to their levels of ability. A nation-

*For a detailed description, see "Report of the Seminar on Educational Guidance and Counselling", Deptt. of Extension Services, Govt. Training College, Jullundur, Publication No. 25, Oct. 15, 1958, pp. 36-43.

wide study conducted in United States showed the following Median I.Q. (Intelligence Quotient) of the High School boys in different courses :

<i>Courses</i>	<i>Median I Q.</i>
Technical	114
Scientific	108
Academic	106
Commerce	104
Trade	92

From the above it follows that for guidance purposes, intelligence tests may be divided as follows :

(i) Verbal

(ii) Non-verbal or Performance.

Some of the verbal intelligence tests that have been standardized in India are as follows :

1. General Intelligence Test (in English), prepared by Parsee Panchayat Vocational Guidance Bureau, 209 Hornby Road, Bombay-1.

2. Madras Test of General Intelligence (in English), available from St. Christopher's Training College, Vepery, Madras.

3. General Intelligence Test, Parts A and B (in English) available from Department of Psycho., University of Mysore, Mysore.

4. Jalota's Tests of Intelligence in Hindi, Benares Hindu University, Benares-5.

5. Allahabad Intelligence Test (in Hindi), Kitabistan, Allahabad.

6. Group Tests of Intelligence in Hindi for children from 11 to 14 by Uday Shanker.

I. Non-verbal or Performance Tests of Intelligence.

1. Madras Non-verbal Test for General Intelligence. Available from St. Christopher's Training College, Vepery, Madras.

2. Performance Tests of Intelligence under Indian Conditions by C.M. Bhatia, published by Oxford University Press.

3. Progressive Matrices (1938). It is a test of a person's perceptual intelligence which enables him to see the relations between things.

There are many other Intelligence tests which have been standardised at different places in India. Their lists have been given in this book.

II. Achievement Tests. Achievement tests measure the product of learning. They measure the result of training. The standardised achievement tests are very useful for guidance purposes because they point out both the strong and the weak points of the students in various subjects of the curricula.

Some of the standardised Achievement Tests for Indian conditions that have been published so far are as follows :

1. Arithmetic Ability Test (in English), prepared by the Parsee Panchayat Vocational Guidance Bureau, 209, Hornby Road, Bombay-1.

2. Arithmetic Problems, prepared by the Department of Psycho., University of Mysore, Mysore.

3. An English Test, prepared by the United Christian Schools, Jullundur City.*

4. A Test for Understanding Physics (in English), prepared by the Central Institute of Education, 33, Probyn Road, Delhi.

5. A test for Understanding History, Part I and II (in English), prepared by the Central Institute of Education etc.

III. Aptitude Tests. Aptitude means the presence of potentialities for performing a particular task. So, for guidance purposes, a knowledge of the aptitudes of the child is of immense value. For intelligent counselling, a knowledge of the aptitude is absolutely essential.

Some of the aptitude tests that are available and are meant for the Indian conditions are as follows :—

1. Abstract Reasoning, Form A (in English) : Pertinent information about this American test is available from Government of Bombay, Vocational Guidance Bureau, Elphinstone Technical High School Building, 3, Cruickshank Road, Bombay-1.

Mechanical Aptitude Tests

1. Test of Mechanical Comprehension, Form A (in English) : Information available from Government of Bombay.

*Vocational Guidance for Christian Young People by Dr. C.W. Riddle.

Vocational Guidance Bureau, Elphinstone Technical High School Building, 3, Cruickshank Road, Bombay-1.

2. Space Relations, Form A : Information as in No. 1.

3. Revised Minnesota Paper Form : Board Information as in No. 1.

Commercial Aptitude Tests

1. Clerical Speed and Accuracy, Form A (in English) : Information as in No. 1 above.

2. Minnesota Clerical Test : As in No. 1 above.

3. Test of Clerical Aptitude : Prepared by the Parsee Panchayat Vocational Guidance Bureau, Bombay.

4. The Clerical Ability Test : Prepared by the Department of Psycho., University of Mysore, Mysore.

IV. Tests of Interests. If the known interests of children are taken into consideration while conducting a programme of guidance, good results will accrue. Interests are very strong determinants of human behaviour. When interest is combined with aptitude it leads to sure success, but interest without aptitude means sure failure. Aptitude without interest, on the other hand, may lead to success under some suitable motivation. Even then it will be very advantageous for the counsellor to know the interests of the counsellees for guidance purposes. Interests can be easily measured with the help of interest and preference inventories. The important interest inventories are :

1. The Adjustment Inventory by Hugh M. Bell : It gives measures on home background, health, social adjustment and emotional adjustment.

2. California Test of Personality by L.P. Thorpe, W.W. Clark and E.W. Tiegs : These tests attempt to measure self-adjustment and social adjustment.

3. The Bernreuter Personality Inventory by R.G. Bernreuter : This inventory provides measures for neuroticism, self-sufficiency, dominance, self-confidence and solitariness.

4. Sentence Completion Test by N.L. Dosajh : It consists of 84 items. The test has been designed to gain information about the post-graduate teachers' adjustment problems while under training. It tries to throw light on adjustment difficulties of post-graduate teachers under training in the following areas :

Health, Living Conditions, Relatives, Friends and Neighbours, Teaching Profession and Sex.

V. Personality Inventories and Tests. 1. Minnesota Multiphasic Personality Inventory is a good device for studying one's own personality. It throws light on the various abnormalities and like other inventories is useful only if the individual fully cooperates for the analysis of his personality.

2. Projective Tests: They systematically undertake to study personality as a whole. They are called projective tests because the individual in these tests projects himself on to the unstructured stimulus and thus unconsciously reveals himself. They uncover forces which underlie overt behaviour and are otherwise not observable. The most widely used projective tests are: The Rorschach Test; The Thematic Apperception Test; The Children's Apperception Test; Mosaic Test; Picture-Frustration Test; Szondi Test; Horn-Hellersberg Test etc.

(i) *The Rorschach Test.* The Rorschach Test consists of ten cards having some unstructured standardised plots on them. The subject is required to tell what he sees in each card, or what those blots might be for him or what they make him think of. The responses are scored according to location, determinant and content. Locations are scored to the area of the blot used in the response. Categories are W (whole), D (commonly perceived sub-divisions), and Dd (Unusual detail). In scoring determinants, the score identifies the elements in the blot which led the subject to see what he did. The main determinants are: Form, colour, movement and shading. Responses which exactly match the blot are scored F^+ , those which do not match the form are scored F^- . Where there are two or more determinants affecting a blot, they are combined e.g. CF is a response which is predominantly determined by colour and less by form.

For content scoring the responses are humans (H), parts of human (Hd), animals (A), parts of animals (Ad), objects (Obj), Nature (N) and so on. Responses are also categorized as popular (P) or original (O).

Interpretation of Rorschach scores is rather difficult and needs a lot of practice.

(ii) *Thematic Apperception Test:* In this test the subject is required to tell a story about a picture: What is happening; what

led up to the scene, and what will be the outcome. The pictures are such that they touch upon the past experiences, conflicts, and wishes of the subject. So the subject unconsciously projects himself into these stories. The analysis is based on the content of responses. TAT identifies the subject's conflicts and attitudes towards self. TAT set consists of 19 pictures and one blank card.

(iii) *Children's Apperception Test (C.A.T.)* : Dr. Kris was of the opinion that children identify themselves much more readily with animals than with persons. Dr. Kris thought that TAT could not entirely fulfil the need of the children between the ages of three to ten years. So CAT was devised to serve the same purpose as TAT for grown ups. The CAT consists of ten pictures showing animals in different situations. The situations are such that they elicit responses to feeding problems, oral problems of sibling rivalry, attitude towards parental figures. CAT also elicits the child's fantasies about aggression, about acceptance by the adult world, and his fear of being lonely at night with a possible relation to masturbation, toilet behaviour and the parents's response to it. The analysis of this test is very much like the TAT.

But before these tests are used, a very special training must be obtained for each of them. In U.S.A., the projective tests are employed in neuropsychiatry, educational counselling, vocational guidance and the evaluation of the military personnel. The use of projective tests like Rorschach, Thematic Apperception and Horn-Hellersberg etc., can only be made by the clinician and the psychiatrist but the teacher may use art, drama, and music etc., those are the expressive techniques, which too are projective in nature.

APTITUDE AND APTITUDE TESTS

What is an Aptitude ?

In Warren's Dictionary, 'Aptitude' is defined as "a condition of characteristics regarded as symptomatic of an individual's ability to acquire with training, some (usually specified) knowledge, skill or set of responses such as the ability to speak a language to produce music, etc." According to Segel, 'Aptitude indicates special ability and prognostic measure.' According to Bingham, 'Aptitude is a measure of the probability of success of an individual, with training, in certain type of situation.'*

The aptitude of an individual at a particular moment may be the result of both the inherent and the environmental factors. When we say that 'A' has an aptitude for music, we mean that his present condition is such that if he were to learn music, he will succeed in the line. This condition may be inherited e.g. he may have a musical throat or it may be acquired, for example, he as a result of living in the company of good musicians can sing certain musical tones or it may be the result of both and generally it is the last.

*Bingham, Walter V. : 'Aptitude and Aptitude Testing', pp. 15-23, Harper and Brothers, New York, 1937.

Aptitude Tests : There are a number of aptitude tests that have been used in foreign countries. The following are just a few of them.

Tests of Musical Talent

Seashore's tests of musical talent are quite well known.* The tests measure sensitiveness of the ear to tones, the musical imagination, the musical memory, the musical feeling, the time^s sense, the sense of rhythm and the sense of harmony and melody. The examiner on the basis of the results of these tests can say what kind of musical training and achievement, if any, the pupil is suited for and what is the probable extent of achievement and rates of progress. Seashore presents the following list of factors of the musical mind :

I. Musical Sensitivity**

A. Simple forms of impression :

- (i) Sense of pitch
- (ii) Sense of intensity
- (iii) Sense of time
- (iv) Sense of extensity.

B. Complex forms of appreciation :

- (i) Sense of rhythm
- (ii) Sense of timbre
- (iii) Sense of consonance
- (iv) Sense of volume.

II. Musical Action

Natural capacity for skill in accurate and musically expressive production of tones (vocal, instrumental, or both) in :

- (i) Control of pitch
- (ii) Control of intensity
- (iii) Control of time
- (iv) Control of rhythm
- (v) Control of timbre
- (vi) Control of volume.

*Carl E. Seashore : *Vocational Guidance in Music*, University of Iowa Monographs, First Series, No. 2, Iowa City, University of Iowa Press, 1916.

**Joseph G. Sveit, Don Lewis and Carl E. Seashore : *The Revision of the Seashore Measures of Musical Talents*, Series on Aims and Progress of Research, No. 65, Iowa City, University of Iowa Press, 1939.

III. Musical Memory

- (i) Auditory imagery
- (ii) Motor imagery
- (iii) Creative imagination
- (iv) Memory span
- (v) Learning power.

IV. Musical Intellect

- (i) Musical free association
- (ii) Musical power of reflection
- (iii) General intelligence.

V. Musical Feeling

- (i) Musical taste
- (ii) Emotional reaction to music
- (iii) Emotional self-expression in music.

Mechanical Aptitude Tests

1. Stenquist Mechanical Assembly Test is very well known. It measures a person's ability to put together the parts of mechanical devices, for example, a bicycle bell, an expansion nut, a die holder.

2. Minnesota Spatial Relations Test : It is patterned after H.G. Link's Form Board. It uses a set of four standard form boards (A, B, C, D) out of each of which have been cut 58 pieces of different forms and sizes. The task is to put each of these pieces in its proper space.

3. The Wiggly Blocks* : This consists of nine wooden blocks of irregularly wavy contour. When properly assembled, they fit together to make a solid rectangular block. The speed with which this is done is a measure of ability to visualize structure in three dimensions.

4. Minnesota Paper Form Board** : This test presents sixty-four problems similar to the one illustrated. In the upper left-hand corner of the diagram at 'Ex' are two geometrical forms. The task is to decide which one of the other five figures represents these forms placed together. Evidently the answer is 'E'.

*H.H. Remmers and J.W. Schell : "Testing the O'Cooner Wiggly Block Test", *Personnel Journal*, 12 ; 155-159.

**D. G. Paterson and Others : *Minnesota Mechanical Ability Tests*, Minneapolis, University of Minnesota Press, 1930.

5. T.W. MacQuarrie's Tests for Mechanical Ability* : This test gives a rough indication of aptitudes for acquiring manipulative skills. It requires some ability to recognise space relations, speed of decision and of movement, hand and eye co-ordination, muscular control and visual acuity. It is a paper-and-pencil test. There are seven sub-tests :

(i) Drawing a pencil line as fast as possible through a pattern of irregularly spaced opening without touching them.

(ii) Putting three dots in each of a number of circles as fast as possible.

(iii) Putting a dot in each of many smaller circles.

(iv) Copying patterns each of which consists of four connected straight lines.

(v) Identifying the location of dots in squares by reference to the corresponding positions of letters in a larger square.

(vi) Counting the blocks which touch certain blocks in each of several pictured piles.

(vii) Following with the eye, one after another, each of several numbered lines drawn irregularly through a maze-like pattern and to identify by means of the appropriate number the end of each line.

6. L J.O'Rourke's Mechanical Aptitude Tests** : Part I is pictorial. The task is to indicate which of the pictured tools, such as a screw driver, a wrench, and a brace, is used with each of the pictured objects, such as a nut, a bit, and a screw, also to indicate which tools are used to do certain things, such as to thread a round hole in a piece of metal. Part II is entirely verbal. Sixty mechanical information questions are presented in multiple choice form.

7. Stenquist Mechanical Aptitude Tests I and II*** :

J. L. Stenquist's two paper-and-pencil tests of mechanical aptitude resemble Part I of O'Rourke's Mechanical Aptitude Tests in the use of pictorial materials. Test I consists of 95

*S.D. Horning: "Testing Mechanical Abilities by the MacQuarrie Test", *Industrial Art Magazines*, Oct., 1926.

**Distributor, Educational and Personnel Publishing Co., Washington, D.C., and Psychological Corporation, 522, Fifth Av., New York.

***J. L. Stenquist: *Measurement of Mechanical Ability*, Teachers College Contributions to Education, No. 130, 1923.

problems. In each, the task is to find which of five pictures—of common tools, mechanical contrivances or parts—belongs to one of five other pictures. Test II consists partly of material similar to that of Test I and partly of questions about pictures and diagrams of machines and machine parts. These questions call for keen perception of mechanical relations and ability to reason about them.

Tests of Teaching Ability

1. Cox Orleans Prognosis Test of Teaching Ability :

This test was designed by W. W. Cox and J. S. Orleans to measure ability to learn the subject matter taught in normal schools. The five parts test the candidate's general information, knowledge of teaching methods and practices as acquired from his observation as a student, ability to learn the type of material included in professional books used in teacher training course, ability to understand educational reading matter, and ability to study and work out educational problems.

2. Imagination and Maturity as Factors Indicative of Success in Teaching—Doctoral thesis by N. L. Dosajh :

The thesis shows how the Horn Hellersberg test can be used for measuring levels of imagination and emotional maturity. Horn Hellersberg test consists of three sheets having four rectangles on each and fourth sheet having a blank rectangle. All rectangles on the first three pages have quite haphazard lines. The subject is required to make something meaningful from these lines. An effect has been made to measure the level of imagination and emotional maturity of the subject from a study of what he makes. The subjects showing more of originality and less of commonplace objects have been classed higher in imagination from those who draw more of commonplace objects. Similarly subjects whose drawings are characterised by a high quality of form accuracy, organisation and combination of elements with enlivening of the sketches and lot of variety have been classed higher in imagination than those who show vague form and poor organisation in their drawings. As regards maturity, the levels have been determined by studying the nature of the responses shown in the drawings.

In order to test the reliability of the Horn Hellersberg

Test as a measure of imagination and maturity, a parallel form has been used. The coefficients of reliability for imagination and maturity are 0.65 and 0.59. For validity the Rorschach Test was used. The two validity coefficients of correlation for imagination and maturity are 0.79 and 0.69 respectively. The coefficients of correlation between levels in imagination and maturity on the H.H. test on the one hand and the levels in skill in teaching on the other have been calculated. The summary of the results is as follows :

Coefficient of correlation between levels of Imagination on H.H. and levels in Skill in Teaching is 0.71 and coefficient of correlation between levels in Maturity on H.H. and levels in Skill in Teaching comes to 0.80.

Tests of Clerical Aptitudes

1. Minnesota Vocational Test for Clerical Workers—Long Form and Short Form*—Arranged by Dorothy M. Andrew :

Bank tellers, accountants, book-keepers, stenographers, typists and general office workers have shown good results on this test. The test differentiates not only between clerical workers and other people, but also to some degree between classes and grades of clerical workers. The first part of the test consists of 200 pairs of numbers ; and the second of 200 pairs of names. The subject is required to match them.

2. Number Checking and Word Checking—Johnson O'Connor's Worksamples No. 1 and No. 43** :

This test indicates ability to notice slight differences between pairs of numbers and words. This ability is very useful in many professions besides that of an Accountant. Clerks of many kinds do well in number-comparison and word-comparison tests.

* (1) Helen J' Green, Isabel, R. Berman, Donald G. Paterson and M. R. Trabue : *Manual of Selected Occupational Tests*, Minneapolis, University of Minnesota Press, 1933.

(2) Dorothy M. Andrew and Donald G. Paterson : *Measured Characteristics of Clerical Workers*, Minneapolis, University of Minnesota Press, 1934.

** (1) Johnson O'Connor : *Born That Way*, Baltimore, Williams and Wilkins, 1928.

(2) Johnson O'Connor : *Psychometrics*, Cambridge, Harvard University Press, 1934.

3. General Test for Stenographers and Typists—Developed by the Research Division, U. S. Civil Service Commission* :

This test is designed to measure the adaptability, mental alertness, and knowledge which typists and stenographers should have, aside from their specific skills. Questions involve practical judgment, vocabulary, English usage, spelling and reading comprehension.

4. Test of Clerical Aptitude—Prepared by the Parsee Panchayat Vocational Guidance Bureau, 209, Hornby Road, Bombay-1 :

This test aids in the selection of employees for clerical positions and in the guidance of persons who wish to seek training in the clerical field. The test consists of two parts. It tries to study the following mental functions :—

Part I. Number Checking : Accuracy and quickness in perception of figures.

Part II. Name Checking : Accuracy and quickness in perception of words.

5. The Clerical Ability Test—Prepared by the Department of Psycho., University of Mysore, Mysore :

The test consists of the following sub-tests : Checking ; Classification ; Arithmetic ; Copying ; Filing ; Speed and Accuracy ; Problems and Oral Instructions.

Test of Scientific Aptitude

Stanford Scientific Aptitude Test by D.L. Zyve** : The test indicates aptitude for the various branches of engineering, chemistry, physics, biology and other work in which success depends in part upon the ability to profit by training in scientific method. The exercises measure eleven of the components of the scientific ability e.g. ability to suspend judgment, ability to detect fallacies and inconsistencies, ability to reason logically and originally and ability to draw correct inductions and deductions.

Tests of Medical Aptitude

1. Psychiatric Screening of Medical Students by R. Orton

*L.J.O. Rourke : 'Scientific Personnel Selection', Occupations, Vol. XII, No. 8, April, 1934, 29.29.

**Stanford University Press, Stanford University, California.

and D.R. Martin—The Lancet, August 28, 1948, pp. 321-22. The test material consists of three sections :

(i) Material usually obtained at interview (a) family history ; (b) academic background and achievement ; and (c) general activities and interests.

(ii) Intelligence tests : (a) The Raven Progressive Matrices (2) min. version ; and (b) the group test 33 of the National Institute of Industrial Psychology.

(iii) More purely psychological tests : (a) A personality inventory of much the same type as the Mill Hill neurotic inventory described by Eysenck (1947) and (b) the expanded multiple-choice Rorschach test. The Rorschach cards were projected on to a screen. On a printed sheet were three sets of ten answers for each card. Students were asked to indicate which was their answer of choice in each set for each card in turn. This showed that screening by this method could fairly reduce the number of applicants requiring to be interviewed.

2. The Selection of Medical Students by Asenath Petrie—The Lancet ; August 28, 1948, pp. 35-227 :

The tests used were adaptations of current American Intelligence tests. They included one test of Thorndike's (1925) completion arithmetic, verbal and directive battery (C.A.V.D.). Cowdery and Evell (1931) have reported a high correlation between the C.A.V.D. battery and medical school grades. The other sets, which were adaptations of some of the Thurstone's (1938) primary abilities tests, were tests of vocabulary, verbal classification, memory, fluency, non-verbal intelligence, and spatial perception. The test of spatial perception included on the assumption that the problems confronting the medical student in anatomy required particularly good spatial visualisation. The two tests of neuroticism used were the Maudsley medical questionnaire (Eysenck 1947). The tests were included on the assumption that neuroticism was a great impediment in the way of success of a student. The results have shown a high predictive value for the tests. The tests do not guarantee that those passing them will be successful, but they do ensure that they have the ability to succeed if outside circumstances are favourable.

3. The Vellore Medical College Selection Methods by Mrs. Naomi Carman and Dr. Joy Paul, Vellore and the Staff of

the Psychometric Research and Service Unit, Research and Training School, Indian Statistical Institute, Calcutta :

The selection method used is a two-stages process. The first stage consists of a series of objective ("new-type") tests of knowledge and ability. The second stage includes various types of tests which try to get at the student's personality, level of motivation and drive, interests, emotional stability etc.

ART JUDGMENT TESTS

1. **Meier-Seashore Art Judgment Test*** : The task is to select from each of 125 pair of pictures the one that is better — "more pleasing, more artistic, more satisfying". Each pair consists of a reproduction of a picture altered so as to lower its artistic merit. The number of unaltered masterpieces considered "better" is taken as a measure of aesthetic judgment or insight.

2. **McAdory Art Test**** : The material consists of 72 plates, each of which pictures a single subject in four different ways. They deal with common objects of everyday life, including furniture, utensils, and textiles, as well as with architecture, paintings, and graphic arts. The illustrations on each plate, designated as A, B, C and D, differ with regard to atleast one essential art element. Each set of four illustrations has been ranked in order of merit by judges whose artistic ability is well recognised.

A SUGGESTED MINIMUM TESTING PROGRAMME

Testing, as already mentioned, forms an important part of the guidance programme. It helps the guidance worker to

*(1) N.C. Mier (Preferably by C.E. Seashore) : Aesthetic Judgment as a Measure of Art Talent, University of Iowa Studies, Series on Aims and Progress of Research, 1925, Vol. I, No. 19.

(2) N.C. Mier: "Special Artistic Talent", (A Review of This and Related Work), Psychological Bulletin, 1928, 25 : 265-271.

(3) Madaline Kinter : The Measurement of Artistic Abilities, New York, Psychological Corporation, 1933.

** (1) Margaret McAdory : The Construction and Validation of an Art Test, Teachers College Contribution to Education No. 383, New York, 1929.

(2) Margaret McAdory, Siceloff and Ella Woodyard : Validity and Standardization of the McAdory Art Test, New York, Bureau of Publications, Teachers College, 1933.

(3) Madaline Kinter: The Measurement of Artistic Abilities, New York, Psychological Corporation, 1933.

collect information about the subject in the quickest, easiest and most objective manner.

The success of any testing programme very much depends upon the right choice of the test that is the most appropriate one for the thing to be measured. Before a test is used it should be carefully examined. The items included in the test should be thoroughly scrutinized so as to see whether they measure what the tester has in mind. The validity coefficient of the test will indicate that very appropriately. Validity coefficient is the coefficient of correlation between the scores obtained on the test by a sample and the scores made by the same sample on some already known criterion. A test whose validity falls below 0.6 is not very useful. Effort should be made to select a test whose validity coefficient is about 0.6.

The second important thing that must be noticed about a test, before it is administered, is that it should be reliable. A test is reliable if it gives nearly the same score if readministered. Each test maker gives the reliability coefficient of the test which is generally a coefficient of correlation between the scores obtained on the test by a sample and the scores obtained by the same sample on a readministration of the test called the test-retest coefficient of reliability. It can also be coefficient of correlation between the test scores and scores obtained on a parallel test known as 'Parallel Method' coefficient of reliability. It can also be a coefficient of correlation between one half and the other half of the test itself, known as the 'Split Half' coefficient of correlation. A good test must have a reliability coefficient round about 0.9.

Then a good test must be convenient to administer. It should not be so complicated as to demand conditions and apparatus that are not easily obtainable in a class-room situation. Then the scoring should be convenient and quick preferably it should be capable of being scored by a machine. Lastly, it should not be costly so that each and every school can afford to purchase it.

For achievement tests two measures—curricular validity and statistical validity must also be taken into consideration. By the former it is meant that the content of the test is fully representative of the content of the course. That is, it is testing uniformly all areas of the course and is not biased towards a

particular portion. By statistical validity it is meant that the test correlates highly with some external criterion which is taken as an accepted measure of the trait that the test purports to measure.

While chalking out a minimum programme of testing in higher secondary schools in the Punjab, we have to bear in mind that we have only a few standardised tests that can be used in our State. In fact most of our guidance programme will be based on criteria other than testing. But gradually as more and more tests are standardised and local norms are constructed, it will be possible to increase our testing programme. In fact, at the moment, for many areas of testing—like interests, attitudes, and personality, we have no standardised tests. So our guidance programme at this stage will have to do without any testing in these areas. The only possible start and that too in rather a humble way, can be made in the field of intelligence and achievement testing. Even in the case of achievement tests, we neither have properly standardised tests for all classes of our high schools nor we have standardized tests for all the subjects included in the school curriculum.

The following minimum testing programme is suggested :
A general intelligence test should be administered to the 'delta class' *i.e.*, the pre-secondary class, so as to help diversification at the higher secondary level. For effecting this classification, we can make use of the results of the General Intelligence Test and the examination marks in the various subjects secured at the middle school level.

Knowing from a study in the United States that the following median Intelligence Quotients (I.Q.'s) are needed for the different courses, we can conclude that I.Q. of the child will roughly indicate the group that he should take at the higher secondary level. (Technical—114, Scientific—108, Academic—106, Commerce—104 and Trade—92). On the basis of I.Q.'s, we could, then, roughly divide students into four groups. The topmost level in intelligence could be considered for 'Technical' and 'Science' groups, the second level for 'Humanities' and the third and fourth levels for 'Agriculture' and 'Commerce' groups.

Achievement tests having diagnostic value may well be administered during the whole course of the Higher Secondary.

This will enable us to appraise of pupil progress in the various subjects and suggest remedial work in various fields.

Measures of special intelligence or aptitude may be administered only in special cases. Aptitude tests for Music, Art, Technical and Science etc. may be administered on individual basis. In the absence of our own standardised aptitude tests, we have to depend upon the results of some foreign aptitude tests. The following is the list of some foreign and Indian Aptitude tests that can be safely used for aptitude testing :

1. Tests of Musical Talent

Seashore's tests.

2. Mechanical Aptitude Tests

- (a) Minnesota Spatial Relations Test.
- (b) Minnesota Paper Form-Board.
- (c) T.W. MacQuarrie's Test for Mechanical Ability.
- (d) L.J.O'Rourke's Mechanical Aptitude Tests.
- (e) Stenquist Mechanical Aptitude Tests I & II.

3. Tests of Teaching Ability

- (a) Cox Orleans Prognosis Tests of Teaching Ability.
- (b) Use of Horn Hellersberg Test for measuring teaching ability as worked out by N.L. Dosajh in his Ph.D. thesis—'Imagination and Maturity as Factors Indicative of Success in Teaching'.

4. Tests of Clerical Aptitudes

- (a) Minnesota Vocational Test for Clerical workers.
- (b) Test of Clerical Aptitude prepared by the Parsee Panchayat Guidance Bureau, 209, Hornby Road, Bombay-1.
- (c) The Clerical Ability Test prepared by the Deptt. of Psycho., University of Mysore, Mysore.

5. Test of Scientific Aptitude

Stanford Scientific Aptitude test by D. L. Zyve.

6. Art Judgment Tests

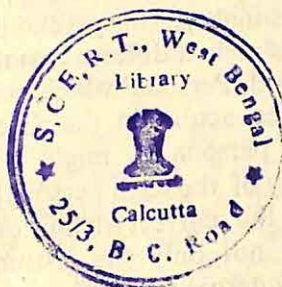
- (a) Meier Seashore Art Judgment Tests.
- (b) McAdory Art Test.

Administration of Tests. The following are some of the suggestions for the administration of the tests :

1. The room must be free from noise and other disturbances.

2. The seating, lighting, proper temperature and ventilation arrangement must be made before hand.
3. While the test is going on a tablet may be put outside informing the outsiders as to the fact that the test is being conducted.
4. The instructions accompanying the test must be strictly adhered to and the test should preferably be administered by the class-teacher rather than an outsider.
5. Care should be taken that fatigue does not result because of a long test.

Interpretation of Results. It must be remembered that tests are merely tools that help the counsellor in the guidance work. So care should be taken in interpreting the results shown by those tests. For guidance purposes, the test results must be interpreted in conjunction with the other data *e.g.* examination results, cumulative records, direct observations, family environments, social and economic position of the counsellees. The test score have only any real value if the norms for that particular test have been prepared, otherwise the raw score is meaningless for guidance work.



PERSONALITY AND PERSONALITY ASSESSMENT

Meaning. It is not very easy to define the word 'Personality'. A common man has absolutely a different conception of the word 'Personality'. For example, a person, who has a fine physique is tall, robust and good-looking, is generally spoken of as having a good personality. In psychological terms, the word personality has absolutely a different connotation. The term is derived from the word 'Persona' which actually means a theatrical mask used by the actors in the Greek drama. If understood in this sense, personality might mean simply the outer mask. So the etiology of the term personality is slightly misleading with regard to the correct definition of personality. Personality is certainly not only the assumed, the external but mostly the vital, the internal and the essential. Psychologically personality is all that a person is. It is the totality of our being and includes physical, emotional, social, mental and spiritual make-up of the individual. Again personality is not the same as character. Character is essentially a moral term referring to the students of right and wrong, whereas personality is purely a psychological term and this cannot enter into the study of ethical values.

Allport distinguishes as many as fifty meanings of the word 'Personality'. Some of the more recent definitions of personality are as follows :—

Morton Prince defined personality as "the sum total of all the biological innate dispositions, impulses, tendencies, appetite and instincts of the 'individual' and dispositions and tendencies acquired by experience. The main defect of this definition is that a mere enumeration of various elements or the "sum total of the actual or potential behaviour patterns of the organism" does not describe the total organization or structure of a human being any more than mere counting of bricks describe a house.

Warren and Carmichael call personality "the entire organization of a human being at any state of its development".

William Healy defines it as "an integrated system of habitual adjustments to the environment, particularly to the social environments".

William James took into account the various levels of integration in a hierarchical order. He talked about the various levels of self—the material, the social, the spiritual and the pure self.

McDougall defined personality as "a synthetic unity of all mental features and functions in their intimate interplay".

Lewin's approach is more dynamic. He defines personality as "a dynamic totality of system".

Murphy claimed that personality is not the sum or even the interaction of separate traits but is a unitary function more of adjustment in relation to which each specific activity or interest, no matter how trivial, must be seen. Murphy further elaborated by calling a person a distinguishable individual, definable in terms of a qualitative and quantitative differentiation from other such individuals. So personality according to Murphy "is a structured whole definable in terms of its own distinctive structural attributes in an organism—environmental field, each aspect of which stands in dynamic relation to the others".

Allport says, "Personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustment to his environment."

According to Brown, personality is the final differentiation which the individual makes by incorporating both inherited and acquired powers to stimulate and to activate the imagination of others in art, science and public affairs and also to live in and partake of a super-individual and "super-temporal" word of values.

Correct definitions of personality take into consideration these factors :

- (i) Dynamic nature of personality ;
- (ii) Its integrated behaviour ; and
- (iii) Its nature emerging as a result of interaction between inherited potentialities and environmental influences.

Personality and Character. Character is merely a part of personality. While considering personality we take into consideration intelligence, character, temperament etc. According to Watson character is only a term used when viewing the individual from the stand-point of his responses to the more conventionalized and standardized situations. According to Shand, every sentiment or emotional reaction towards ideas or objects forms a type of character. McDougall believes that character consists in sentiments formed by the combination of native propensities or instincts with ideas in various ways. According to him this organization of sentiments expressing itself in volition, in the higher forms of action and in the control of action constitutes one's character. McDougall believed personality to be something bigger—synthetic unit of all mental features and functions in their intimate interplay. According to Gordon, personality is a more comprehensive term and includes character. According to him character is merely a special aspect of a developed personality. According to Ogden, "Where personality is the expression of a man's inner life, character is the expression of what he does or believes."

Characteristics of Personality

1. We can speak of personality only in the case of an adult. In children it is still shaping itself.
2. Personality is through and through social. Its development takes place through social interaction. In fact personality implies the reactions of others to one's own qualities and actions.

3. A personality is continually adjusting itself to its environments to one's inner life.
4. A personality is always trying to reach certain goals.
5. A personality functions as a unified whole.

DEVELOPMENT OF PERSONALITY

Impact of Heredity and Environment. Individuals differ from each other because of differences in their heredity and environment. Heredity and environment are correlative factors in the development of personality. The former provides the potentialities and the latter facilitates for the potentialities to be fully realized. So in order to study the impact of education, we have to take into consideration both the factors.

In order to understand the impact of heredity on personality development we should first study the mechanism of heredity as revealed by studies of scientists like Darwin, Mendel, Weisman, Lamarck etc.

Heredity. Heredity is the sum total of inborn individual traits. It explains not only likenesses but also unlikenesses. Biologically it may be defined as the sum total of the traits potentially present in the fertilized ovum.

Heredity vs Environment. In the development of personality what part heredity and environment play, is an important question. Heredity is important for the basic abilities a man possesses such as intelligence, motor skills, acuity of sense organs etc. Heredity is not very important for temperamental traits of emotion stability or for general activity. Heredity is least important in the formation of attitudes, beliefs and manners of thinkings. These latter are formed through the impact of environments. For traits that are dependent upon anatomical features, heredity plays the maximum role and for traits that are developed through training and education, the environments are more important than the heredity. It is not a question of heredity vs environment but of heredity and environment that determine the development of an individual. When an ovum is fertilized by a sperm, the genes of each are in interaction not only with each other but even with the surrounding liquid which may totally change the structure of the developing embryo. So at every stage, we find

hereditary traits interacting with surroundings and thus determining the next stage. All the while intrinsic factors are interacting against the extrinsic ones. So instead of debating whether one function of an individual is "intrinsic" or "learnt", we will do better to take it as a 'succession of stages', each stage being the result of interaction of intrinsics with the environmental factors.

OLD VIEWS ABOUT PERSONALITY STRUCTURE

In the past personalities used to be classified in a number of ways. Some of the famous classifications are as follows :

1. **William James' Classification.** He classified people as tender-minded and tough-minded. The tender-minded follow certain principles. They are thinkers, religious and idealistic in outlook. The tough-minded go by facts. They are materialistic and do not have any faith in religion. They are generally sceptical.

2. **C.G. Jung's Classification.** Jung classified people into three types—Introverts, Extroverts and Ambiverts. The introvert is very self-conscious, is turned inward in his thinking and feeling. He is timid and cautious in his approach. In a trying situation, he gets easily embarrassed. He is rather slow in making decisions. He is reserved and likes to be alone most of the time. He is slow in making friendships with others and keeps in the background on social occasions. He is generally a day-dreamer and prefers to read about things rather than doing them practically. An introvert has great perseverance and does not give up undertaking easily.

The Extrovert. He is turned outward for his activities. He is self-composed and is not easily embarrassed. He is adventurous, plucky and bold. His actions are generally impulsive. He often acts without giving much thought. In social gatherings he is aggressive, hearty and forms friends easily. He enjoys being in a crowd and can rarely be alone. He is very suggestive and easily shifts from one activity to another. He cannot pursue a particular activity for long and likes frequent changes. Since he is rarely alone, he does not day-dream like an introvert.

The Ambivert. No one in this world is either completely an introvert or an extrovert but a mixture of the two. Some are

predominantly extroverts and others are predominantly introverts. In cases where introversion and extroversion are nearly balanced they are called ambiverts.

3. **Kretschmer's Classification.** Kretschmer classified people on the bases of their physical characters. He gave four types :

(a) *Pyknic.* This type of personality is in fact sociable, good-natured, friendly and sympathetic. He is jolly by nature and is an extrovert having a sound physique.

(b) *Leptosome.* This type of person is lean, quick-tempered and unsociable. He is rather reserved, shy and sensitive.

(c) *Athletic.* This type of person is muscular, strong, active and dashing.

(d) *Dysplastic.* Under this heading are included all sorts of irregular type of personalities which cannot be classified in the above three types.

4. **Spranger's Classification.** Spranger classified people on the basis of their life values. According to him the various types are as follows :

(a) *Cognitive type.* They are philosophers, scientists, explorers etc. Their main interest in life is search for knowledge and truth.

(b) *Aesthetic type.* They are generally interested in beauty. The artistes and painters belong to this class.

(c) *Economic type.* The industrialists, businessmen, merchants belong to this class. This type of persons are interested in cutting down cost and effort.

(d) *Political type.* Statesmen and politicians belong to this class. Their main interest is in wielding power.

(e) *Religious type.* Saints, priests and mystics fall under this category. They try to relate this world with the next one.

(f) *Social type.* Social workers and reformers belong to this type. Their main interest is the welfare of their fellow-beings.

MODERN VIEWS ABOUT THE NATURE OF PERSONALITY STRUCTURE

By "Personality Structure" we mean the particular organisation of intrinsic and derived impulses manifested by an individual. Henrick defines the total personality in terms of three systems : Id, Ego and Superego. Each act is described as

belonging to one or another of these systems. Or, it may be merely the result of their interactions. Henrick here refers to the organization of drives, wishes and needs in a systematic pattern. But this is only one aspect of inner organization. Gestalt psychologists employ the term 'personality structure' in a more clearly descriptive sense. In Lewin's essay 'On the Structure of the Mind', we find the following :

"The individual physical experiences, the actions and emotions, purposes, wishes and hopes, are rather embedded in quite definite physical structure—spheres of the personality and whole processes." From the above it is clear that what Lewin means is that personality is organised, but this organisation occurs on different levels. These levels may be designated as behavioural, perceptual and motivational. At the behavioural level, the behaviour is organised on the pattern of elders. This happens in childhood. Children begin to mould their behaviour in such a manner that it falls in line with those of their elders *e.g.* they might show similarities with elders in speech, gesture and manners etc.

On the perceptual level again there is a structuring process. The child perceives his parents and develops his own perceptual pattern likewise. If his parents are warm, friendly and kind, he also begins to show warmth, friendliness and optimism towards others.

At the motivational level an organization of impulses, motives and needs takes place. The organisation is round some dominant attitude. For example, a strong love for truth may enable the individual to integrate his whole personality round it and this may continue through the whole life without being affected by any change. Such an integrated structure provides for various mental processes, wishes, plans, emotions etc.

While studying a personality, it is important to determine as to how it differs from others and how it has assumed the present shape. And for a systematic description of personality according to Lewin, the following factors may be taken into consideration. Complexity, fluidity, accessibility, resistance and centralization.

(i) **Complexity.** Complexity of personality ranges from the extreme simplicity of the child or the feeble-minded adult

to the complexity of the extremely intelligent adult. By complexity is meant the number and variety of situations which have different meanings for the individual. It may mean variety of goals, pleasures and interests that the individual has. A complex personality shows many of them and is a member of a number of social groups.

Qualities of an Infantile Simple Personality. The sensorimotor area is formed. Region of perception and overt movement is also there but the inner systems like skills, emotional prejudices, preferences and motivations are developing. The self is not yet clearly defined. Qualities of an adult 'open' personality. The interests, socialized habits and other traits are visible. The individual expresses himself in business and politics etc. The self is rather difficult to approach.

Qualities of an Adult 'Closed' Personality. The regions of personality are nearly the same as in the case of an 'open' personality but it is very difficult to study the central area. The personality is rather inhibited in self-expression. Many regions are dissociated and there are many inconsistencies in ideas and behaviour. The personality does not lend itself to change easily.

(ii) **Fluidity.** By fluidity is meant a personality in which connections can be easily formed between various organised systems or with the new materials. A fluid personality is able to adapt itself smoothly. The opposite of fluid personality is rigid one. A rigid personality is inconsistent and contradictory patterns are kept up. There is not much communication between one organized system and another. Such a personality may break rather than bend under stress. Such a personality unlike the fluid personality is not able to see the point of view of the other person so easily.

(iii) **Accessibility.** The accessible personalities are 'open' to new stimuli and communicate their own feelings very easily, whereas a 'closed' personality is one which is not easily accessible to external stimulation.

(iv) **Resistance.** Personalities also differ with regard to their resistance to change. Personalities which are rigid and 'closed' generally offer the maximum resistance to change. "The ego region of all types of personalities is most resistant since

each one of us clings most closely to one's picture of oneself." How far the other traits, attitudes, likes and dislikes and values are ego-involved is one of the factors which determines the resistance that a personality will offer to change.

(v) **Centralization.** When a number of organized systems of the personality are ego-involved, it is called centralization. In such a personality, many systems are closely related to the central self. The converse of this type of personality will be when many of the systems are rather independent, and, are not related to the central 'Self'.

PERSONALITY MEASUREMENT

Before we discuss the various methods of assessment of personality, it will be worthwhile to consider if assessment of human personality is possible. There are a number of difficulties. Firstly, it is rather difficult for human beings to assess human beings. The person trying to assess the other human beings gets automatically involved emotionally and thus becomes a member of the ingroup to the detriment of the members of the outgroup. Lord Christ has well said, "Judge not that ye be judged." However a number of attempts have been made to assess human personality. Dr. Gardener Murphy in his book "An Introduction to Psychology" has given three broad classes of tests for personality measurement.

I. Methods of Verbal Report. These methods include questionnaires, check lists and rating scales. These are devices in which the individual says something about himself or about others whom he knows.

II. Behavioural Methods. In these methods, the individual to be assessed is placed in a situation, may be in a miniature form, corresponding to the real situation in which we wish to understand him and then we observe his behaviour.

III. Projective Methods. Such methods are based on the phenomenon of projection. In these methods, it is presumed that the individuals try to project their own feelings, attitudes, attributes, likes and dislikes on the external environments.

I. Methods of Verbal Report

(i) *The Life History Method.* The personality is judged by studying the life-history of the individual as has been written by the individual or by others.

(ii) *The Interview Method.* In this method a number of interviews are arranged. The data thus collected is analysed. This reveals a good deal about the personality of the person.

(iii) *The Questionnaire Method.* In this method a questionnaire is prepared with definite purpose of collecting answers on definite points. The answers collected are compared with the answers of the other individuals.

(iv) *The Check List Method.* It is very much like the Questionnaire Method.

(v) *The Rating Method.* In this method it is estimated and recorded as to what extent the individual possesses certain traits like truthfulness, honesty, altruism etc. and these are compared with others.

(a) *The Life History Method.* This is one of the oldest methods employed by literary biographers for studying the personality of individuals. To get meanings from the life-history data, many literary techniques have been suggested. Recently attempts have been made to standardize this method. Some general kind of information is collected for different individuals, so that the data from one can be compared with others. In this technique a systematic up-to-date study of the person is made and personality is delineated.

(b) *The Interview Method.* The interview may be a structured one or a casual one. A structured interview is preplanned and it tries to elicit information on some definite points. Efforts have been made to standardise interviews but it has generally been observed that better information is obtained from a more flexible type of interview rather than from a structured one. Of course, the interviewer has got to keep at the back of his mind the points on which he wishes to collect information. The author himself collected information regarding the tensions prevalent amongst refugees in the Ahmedabad area by this very technique. A report of the same is published in the book "In the Minds of Men" by Dr. Gardener Murphy on pages 168 to 177. Also the reader is referred to Indian Journal of Psychology, Vol. XXVIII, Jan.—Dec., 1955 issue.

(c) *The Questionnaire Method.* The questionnaire is another very important device by which information can be collected

about anything. For assessing personality special type of questionnaires are prepared. Such questionnaires are also called tests of neurotic tendency. One method of scoring these questionnaires is to count up the number of answers which indicate maladjustment.

Questionnaires can only prove useful for personality assessment if the subject answers the questions honestly. So in cases where the subject is keen to get his personality assessed, they work well, but at all places where the problem is that of selection they do not work because then the subjects distort the answers in a way that they may be selected.

One of the best examples of an objective test for the analysis of personality traits is the Minnesota Multiphasic Personality Inventory by S.R. Hathaway and J.C. McKinley. In this case, the questions are presented on cards which the subject reads and then sorts them out into piles in terms of Yes, No and Doubtful. There are 550 items in all. A number of dispositions of personality can be assessed simultaneously. The questions chosen are such that their answers are known to indicate certain traits. Some of the statements from Minnesota Multiphasic Personality Inventory are given below :

- A- 1 During the past few years I have been well most of the time.
- A-20 I feel weak all over much of the time.
- A-52 I practically never blush.
- B- 3 I sweat very easily even on cool days.
- B-26 There is something wrong with my sex organs.
- B-34 I dream frequently.
- C-11 I have never been in love with anyone.
- C-29 I usually expect to succeed in things I do.
- C-54 Sexual things disgust me.
- D- 2 I like to talk about sex.
- D- 9 Religion gives me no worry.
- D-24 I am a special agent of God.
- D-41 I have strong political opinions.
- E-18 I do not mind meeting strangers.
- E-36 I am a good mixer.

- F- 5 I wish I were not so shy.
 F-51 I cry easily.
 G- 3 I believe my sins are unpardonable.
 G-28 I am not easily angered.

(d) *Check Lists.* In a check list the items are listed together. In the personality study the respondent has simply to check the items that apply to him. For example, in the list given below we might ask the individual to check the statements that apply to him :

I often meditate and think about myself.

My feelings are easily hurt.

I make new friends easily.

I generally take a long time to decide.

I blush very often.

I like to go on long walks alone.

I take good care of my clothes etc. etc.

(e) *The Rating Method.* By rating we mean expressing one's opinion or judgment regarding some situation, object or character. "Rating techniques are devices by which such judgments may be quantified."

Rating scales are of different forms. According to Homer-Kempfer, rating scales may be arranged in four ways :

1. On a straight line :—

(i)

The rater records his judgment by merely putting a tick mark at the appropriate place. The above is an example of a five point scale, but it can also be 3-point or 7-point or even more.

(ii)

The scale can also be merely a line showing the two extremes and the rater can put a tick mark anywhere on the line according to his judgment.

2. Ratings may be arranged as given below :

Excellent Good Average Poor Very Poor

X Statement

Y Statement

Z Statement

The rater has simply to put a tick mark in the appropriate column.

3. The scale may be as shown below just as in a check list :

.....was excellent

.....was good

.....was average

.....was poor

.....was very poor

4. The scale may simply require the rater to rank *e.g.* the teacher might be required to rank the students in order of merit.

The following is an example of a five-point rating scale for studying the temperamental qualities of a child :

For each 'quality' there is a rating line consisting of five divisions, and suitably graded descriptive terms corresponding roughly with the various divisions. Think of the amount of the particular quality possessed by the pupil to be rated ; compare him in each of these qualities with the general run of children of the same age, and mark the point on the scale which seems to indicate the relative strength of quality which he manifests. Certain irregularities will frequently be found ; for example, an individual may be over-confident in some types of situations, and show serious lack of confidence in others. Such an oscillation, which the psychologist terms ambivalence or bipolarity, may occur in respect to several qualities. This can be recorded by making two positions on the scale. A brief comment could be added in such cases :

Inert apathetic	Lethargic	1. Vigour Ordinarily active	Vigorous	Excessively active
Easily distractable	Inclined to wonder from point	2. Attention Attends adequately	Absorbed in what he does	Holds attention for long periods
Vague, illogical	Inclined to be inexact	3. Accuracy Moderately careful and consistent	Consistent and careful	Extremely logical and precise
Pessimistic melancholy	Overserious, lacks humour	4. Characteristic Mood Serious but appreciates humour	Light-hearted and cheerful	Optimistic and jovial
Shows little emotional response	Emotions slowly aroused	5. General Emotionality Moderate feeling reactions	Emotion aroused	Highly emotional
Cold, callous, even harsh	Unsympathetic and disobliging	6. Sympathy Ordinarily friendly and helpful	Warm-hearted and affectionate	Compassionate and self-sacrificing
Almost impossible to persuade, negativistic	Slow to accept suggestions	7. Suggestibility Moderately open to persuasion	Quick to accept suggestions and promptings from others	Highly suggestible and easily swayed by others

8. Perseverance		
Gives in easily, lacks tenacity	Gives up easily in face of difficulty or objection	Very obstinate and persistent
9. Self-Confidence		
Anxious, easily unnerved	Timid, halting	Strongly confident
		Reckless
10. Attitude to Self		
Marked feelings of inferiority	Lacks pride in self	Marked self feelings
		Highly egoistical
11. Insight		
Uncritical of self	Not inclined to examine own motives of work	Self-critical, extensive, self knowledge, objective attitude
12. Introversion and Extroversion		
Continually absorbed in self	Frequently abstracted	Lives almost entirely in world of sensation and action
13. Sociability		
Lives almost entirely to himself	Retiring, unsociable	Invariably seeks company of others, dislikes solitude

14. Attitude towards Members of Opposite Sex

Avoids opposite sex whenever possible	Little interest in opposite sex	Shows ordinary interest in other sex	Prefers company of opposite sex almost exclusively
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15. Leadership

Submissive, always follows others	Dislikes taking lead	Usually follows but leads on occasion	Usually takes the initiative	Dominating not content unless in lead
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16. Independence

Meekly submits to authority	Depends largely on others	Reasonably independent	Independent, goes his way	Aggressively self-reliant, extremely resistive to discipline
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17. Initiative

Rigidly conventional, stereotyped	Lacks originality and spontaneity	Prefers conventions, ventures on occasion	Adventurous, often takes initiative	Extremely adventurous and original
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18. Conscientiousness

No regard for personal standards	Indifferent, unconscientious	Ordinarily scrupulous	Markedly conscientious	Very rigid standards of truth, honesty etc.
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Although the verbal methods suffer from a number of defects, yet they are still very widely used. They are very useful only if properly used. Such methods of evaluation of personality though not satisfactory for screening purposes, yet are very good in helping individuals to understand themselves as far as their personality make-ups are concerned. These methods are therefore very useful to a person who wishes to understand himself better.

II. Behaviour Methods. In the behaviour methods, an experimental situation is created. The experimental situation is very much like the actual situation, which a person is likely to face in life. In order to test the initiative in the potential army officers, artificial situations are created, where they have to show initiative. Their behaviour under this artificial situation is carefully observed. Candidates showing initiative are thus spotted out. The only drawback with these behaviour tests is that they give information on a particular trait only and not about the whole personality. If the verbal tests and behaviour tests are combined, the results are very satisfactory. For the purposes of screening, especially when the number of candidates is very large, of course we need quicker methods. To meet this object, projective tests have been devised, which if supplemented with other information can prove extremely useful.

III. Projective Methods. Projective methods are based on the phenomenon of 'Projection'. Human beings have a tendency of projecting their inner-world of imagination on the objects in the environments. In the projective methods some unstructured material is provided to the subject so as to enable him to project his feelings, attitudes and fantasy world etc. on the unstructured material. We provide the subject with relatively indefinite and unstructured material and then allow him to structure in any way he likes. In doing so he unconsciously projects himself and thus reveals his personality. The vaguer this stimulus, the better chances are there for the subject to project. The common unstructured material used in projective tests are vague and ambiguous pictures, ink-blots, incomplete sentences, some modelling clay, paper and finger paints, haphazard lines etc. The most common projective techniques are as follows :

(i) **The Rorschach Test.** The test is constituted of 10 ink-blots, selected with great care and after a good deal of experimentation by Hermann Rorschach, the author of this test.

Five ink blots are black and white, two contain also brightened colours and the remaining three are made up only of coloured patches of different hues. The test is administered to the subject mostly individually but group methods of administration have also been developed. The cards are presented to the subject in a definite order and in a definite way. He is told "People see all sorts of different things in these cards. I'd like you to tell me what you see, what it might be for you, what it makes you think of." The examiner keeps a record of the time taken by the subject to give the first response. The various responses given are recorded. The various remarks, the behaviour patterns etc. are taken note of and are recorded. After the first administration, the examiner goes over them with the subject once again to get the location of each response and tries to find out whether it was form or colour that primarily helped the subject to determine the response. This also helps the examiner to obtain a further clarification of the response given by the subject.

Scoring. For scoring, the total number of responses in each case are taken into consideration. Again each response is studied with respect to three aspects—location, determinant and content. Location means the area to which the response belongs. It may be a whole blot (W) when the subject uses the whole ink-blot to give one response as he might say in response to the first card that it is a 'bat'. He may base his response on a large portion of the blot (D) as in the case of the second blot he says that "Two clowns are fighting". He may base his response on some small usual detail (d).

Determinant. By determinant is meant the characteristic of the blot that helped in the determination of the blot. The main determinants are the shape or form of the blot (F), colour (C), movement (N) and shading (K). It is also indicated whether the form of response fits well (F⁺) or fits poorly (F⁻). Also the response may depend upon shape and colour (FC) of the blot or shape and shading of the blot (FK). The responses are further analysed as human beings, animals, parts of human

beings, parts of animals, nature and inanimate objects. Each response is further classified as a response occurring very frequently (P) or as an original response (O). A chart showing frequency of each category and number of ratio between different categories are worked out. On the basis of these, interpretation is done.

Interpretation. Interpretation of Rorschach responses can only be done by persons having a good psychological background and a good deal of experience of working with the Rorschach cards. The method of interpretation as given by Klopfer and Kelley is given below :

Number of Responses (R) and Rejection of Cards

1. Significance of the Total Number of Responses.

The range of responses in the case of adults is between 20 and 40. Children below 10 years, subjects with severe lesions of the central nervous system, severely blocked subjects and subjects with a subnormal intelligence have an average of less than 20 responses. A good number of high form level are indicative of intellectual level. If the number of such responses is less than 9 in the case of an adult, it becomes doubtful if the person is normal. If the number of such responses of high form level is more than 75, it is indicative of the fact that the subject is really very brilliant.

2. Significance of Rejections.

Rejection of cards II, IV, VI and IX is less significant than the rejection of any of the other cards. If such a subject persists in rejection of the cards even during the inquiry and interesting the limits the chances are that he may be a psychotic. Neurotic subjects in the majority of cases are able to overcome their blocking either spontaneously during the inquiry or by a special request during the testing-the-limits. If the rejection of the cards is because of intellectual incapacity, added pressure in testing the limits at the most produces inaccurate or non-sensical responses. Neurotic subjects generally reject cards II, IV, VI and IX or VIII and X *i.e.*, because of the colour situation or because of the shading. If more than four cards are rejected, especially not the normal ones, but the ones which are usually accepted for no reasons it is a pointer towards psychotic disorder.

Time Factor

1. **Average Time Per Response (Response Time).** The average is between $\frac{1}{2}$ minute to a minute. An average time per response of more than $1\frac{1}{2}$ minutes is found only among subjects with some rather severe pathology or extreme inhibitions.

2. **Average Time before First Response to Each Card (Reaction Time).** If the average reaction time to the achromatic cards and to the coloured cards is more than ten seconds, it has an interpretive significance.

Relationship among Content Categories

1. **Percentage of Animal Responses (A%).** A great number of A and A-d responses indicates narrow range of interests of the subject. Responses besides those of human and animal are indicative of diversity of interests.

2. **Popular and Original Responses.** If the subject does not use the most obvious concept used by the great majority of other subjects, it may mean that the subject is not willing to do so. The use of 5 or more popular concepts shows that the subject possesses the capacity and interest in thinking along the same lines as other people. In the case of a superior subject the number of original responses (O) reaches or exceeds popular responses (P), but there is a minimum of 5 in either case. Again the quality of the original responses is sufficiently high.

Whole Figures and Parts of Figures ($H+A$) : (H_d+Ad). Most of the subjects see a more or less complete human or animal figure rather than only a part of such a figure. If a subject sees only profiles, heads, legs and hands or any other parts of a human or animal body, the possibility is that the subject has a tendency to be more critical. It has been roughly determined that threshold for such a critical attitude is reached if the number of H_d+Ad exceeds half the number of $H+A$.

(ii) **The Thematic Apperception Test.** Another projective test is called Thematic Apperception Test usually referred to as TAT. It was originally devised by Murray and Morgan in 1935. It consists of a series of pictures about which the subject tells stories. The test is based upon the fact that when a person interprets an ambiguous social situation, he is likely to reveal his own personality. The test has been so named because it

reveals basic themes that recur in the imaginative productions of a person. Apperception means a readiness to perceive in certain ways on the basis of one's personal experiences. So as the name signifies, in this test the subject interprets an ambiguous stimulus according to his individual readiness to perceive in certain ways.

The subject's main task is to frame a story on the picture. The examiner says, "I am going to show you some pictures. I want you to tell me a story about what is going on in each picture. What led upto it, and what will the outcome be?" The story told by the subject is recorded verbatim.

Scoring and Interpretation. Many schemes have been worked out for scoring TAT material. The interpretation and analysis of the test depends upon the purpose for which the test is administered. Each story is analysed. Each need and press receives a weight score and the needs and presses are then arranged in rank order. At the same time the relationship between the needs are investigated. The present method of scoring studies the style of the story *i.e.* length of the story, language used, originality, variation of content and organizational qualities. The themes that recur in the stories are taken note of. The relation of the outcome of the story with the rest of the plot is studied. The primary and secondary identifications are determined. The main clues for interpretation are the recurring themes.

Procedure. The subject is seated in a comfortable chair with back to the examiner and the following directions are read to him :

"This is a test of your creative imagination. I shall show you a picture and I want you to make up a plot or a story for which it might be used as an illustration." A picture is to be shown to the subject by the examiner and then the subject will make the story basing on the question read out to him by the examiner. "What is the relation of the individuals in the picture? What has happened to them? What are their present thoughts and feelings? What will be the outcome? Do your best. Since I am asking you to indulge your literary imagination you may make your story as long and as detailed as you wish."

Test Material. The material consists of 19 pictures printed on white bristol board and one blank card, making a total of twenty pictures. There are two sets of pictures. Each

set is divided into two series of 10 pictures each. About an hour is devoted to a series. The two sessions are separated by a day or more. If necessary the test administration is followed by an interview.

(iii) **Make A Picture Story Test (Maps).** This test was developed by Shneidman in 1947 and has been called a "Younger brother of the Thematic Apperception Test". It differs from the TAT because in this test the figures and backgrounds are reported. The subject has to make his own choice of figures and has to place them according to his liking.

Materials

(a) **Backgrounds.** There are 22 background pictures, $8\frac{1}{2} \times 11$ inches, printed in black and white on thin card-board. Except two of the cards, there are no figures in any of the pictures. There is an ambiguous human head in the bottom left of the dream background picture and a human-like protuberance in the bed of the bedroom background picture. The set has ambiguous backgrounds such as the stage, the dream, the abstract doorway and the blank card. It has also semi-structured backgrounds such as the Forest, a pleasure spot like Cave, and the desert-like landscape. It also has definitely structured backgrounds—Living room, Street, Medical scene, Bathroom, Bridge, Bedroom, Closet, Camp, Cellar, Raft, Attic, Shanty, Cemetery, Nursery and Schoolroom.

(b) **Figures.** There are 67 figures. A 6-foot human figure is shown as $5\frac{1}{2}$ inches tall and this scale is maintained throughout. Any figure can be placed on any background. The figures show various facial expressions. They have various poses. There are 19 Male Adults, 11 Female Adults, 12 Children; 19 Minority group figures like Negroes, Jews, Orientals, Mexicans; 2 Animal figures; 2 figures of indeterminate sex; 6 legendary and fictitious characters and 5 silhouette and figures with blank faces.

(c) **Figure Location Sheet.** This is a sheet on which there are highly printed reproductions of a smaller size of all the background pictures. With the help of this the examiner can record the subject's choice and placement of these figures.

(d) **Figure Identification Card.** This card groups the figures and helps to identify each figure by a code symbol.

(e) **Theatre Carrying Cases.** This is a smaller wooden theatre and also serves as a carrying case for the test materials.

Administration. After the rapport is established the following instructions are given to the subject :

"What I am going to do is to show you pictures like this one at a time." At this point, the living room background picture is placed directly in front of the subject, so that the bottom of the picture is along the edge of the table. "You will have pictures like this"—at this point all the figures are poured out of their envelope on to the table top—"and your task is simply to take one or more of any of these figures and put them on the background picture as they might be in real life. We might start by sorting the figures so that you can see each one. Spread them out on the table." At this point, the examiner takes a few figures and lays them on the table with the feet of the figures towards the subject. He then permits its subject to arrange the remainder of the figures. The subject places all the figures on the table and asks no questions about the purpose of the test."

After all the figures have been placed on the table by the subject, the examiner says : "I would like to go over the instructions in a little more detail. As I said, all you are to do is to take one or more of any of these figures, put them on the background as they might be in real life, and tell a story of the situation which you have created. In telling your story, tell if you can, who the characters are, what they are doing and thinking and feeling, and how the whole thing turns out. Go ahead."

After the first story is completed and the examiner has finished writing the story and has indicated the choice and placement of the test figures by making appropriate markings on the figure location sheet, he states the following : "That was a very good story. You caught on perfectly. You took one or more of the figures and placed them on the background picture as they might be in real life and told a story of the situation you created. In the other stories you may use either the same or different figures. We are going to do about a dozen of these background pictures."

Ordinarily eleven background pictures are used with each subject.

(iv) **Children's Apperception Test (C.A.T.)**

History. The idea of C.A.T. was conceived by Earnest Kris. He thought that children could identify themselves with animal figures more readily than with persons. It was felt that T.A.T. meant for adults could not fulfil the needs of the children and similarly Picture-story Test could not be used prior to adolescence. The C.A.T. was prepared for children between 3 years and 10 years. Violet Lamout drew the pictures according to the suggestions of the authors. She drew 18 pictures. Sets of these pictures were distributed to some child psychologists for trial. On the basis of this experience, ten most useful pictures were selected.

Nature and Purpose of the Test

This test consists of ten pictures depicting animals in various situations. The C.A.T. is a projective method *i.e.* "a method of investigating personality by studying dynamic meaningfulness of the individual differences in perception of standard stimuli". C.A.T. is good for children of 3 to 10 years. Symonds-Picture-Story-Test is good for adolescents, and the T.A.T. for adolescents and adults. "The C.A.T. pictures are designed to elicit responses generally; to investigate problems of sibling rivalry; to illuminate the attitude towards parental figures and the way in which these figures are apperceived, to learn about the child's relationship to the parents as a couple—technically spoken of as the oedipal complex and its culmination in the primal scene; namely, the child's fantasies about seeing the parents in bed together. Related to this, we wish to elicit the child's fantasies about aggression; about acceptance by the adult world, and his fear of being lonely at night with a possible relation to masturbation, toilet behaviour and the parents' response to it. We wish to learn about the child's structure and his dynamic method of reacting to and handling his problems of growth."

Administration. First is good rapport must be established. Whenever possible C.A.T. should be presented as a game. The child may be told that we are going to play a game in which he is to tell a story about pictures, that he should tell what is going on, what the animals are doing now. At suitable points, the child may be asked what went on in the story before and what will happen later.

Interpretation. In interpreting the stories, it is to be seen what the child makes of the pictures and why. Rather than judge by one story, it is safer if we find a common denominator or trend in a number of stories what may be called the theme of the story.

It is to be seen with what figures the subject mainly identifies himself as the hero, the hero being the figure round whom the story is woven primarily. There may be more than one hero. Probably the interests, wishes, deficiencies, gifts and abilities with which the hero is invested are those which the subject possesses, wants to possess, or fears that he might have. It is important to know as to self-image the subject has, the way the child sees the figures and how he reacts to them. Again it is important to know with whom in the family the child identifies. The figures introduced in the story but not shown in the pictures should be taken note of. If some figures in the picture are omitted or ignored in the story related, its meaning may be an expression of the wish that the figure or object were not there. This may mean plain hostility. Main anxieties of the child should be determined. The most important anxieties are physical harm, punishment, fear of losing love and of being deserted. Again it will be useful to note the defences that the child takes *e.g.* flight, passivity, aggression, orality, aquisitioness, renunciation, regression etc. Main conflicts and their nature should be studied. The relationship between a crime committed in the story and severity of the punishment meted out for it, gives us a good measure of child's super-ego development. It should be noted whether the story ends happily or not. From this we can know whether the child is depressed and hopeless, or cheerful and optimistic. From the stories the maturational level of the child can also be studied. We may try to know whether the child is functioning above, below, or consistently with what one could expect at that chronological age. The intellectual level can be studied from the language used, conceptualization, and structure of the stories.

(v) **A Supplement to the Children's Apperception Test (the C.A.T.S.).** This test was designed to learn more about the children. The problems dealt with in these pictures, though not of universal nature, yet they exist in a good many children.

There are ten pictures. Anyone or more may be made use of along with the regular C.A.T. These pictures deal with problems like physical disability, psychosomatic disorder, hypochondriasis, fantasies of children about the mother's pregnancy.

(vi) **Sentence Completion Test (S.C.T.).** The sentence completion test is a variation of the "Word Association Method". S.C.T. decreases the number of associations by making the stimulus directive rather than non-directive. It is better able to suggest contexts, feeling tones, qualities, and specific objects or areas of attention. It allows greater individual freedom and variability of response, and it takes a larger area of the subject's life. The method was first used by Ebbinghaus in 1897 to test intelligence. Tendler used this method as a test for various emotions. Lorge and Thorndike tried to determine the personality traits with the help of this method and evaluated the responses statistically. Rhode used S.C.T. for clinical work to determine the needs, inner conflicts, fantasies, sentiments, attitudes, aspirations and adjustment of the clients. Rhode revised Payne's list. In the final form the Rhode-Hindreth completions blank consists of 64 items. It is intended for individuals approximately 12 years of age. The author claims that her test determines the subject's needs, inner states, traits, press, tastes, sentiments, ideology, ego structure, intellectual status and emotional maturity. On similar lines Shore constructed Self-Idea Completion Test (S.I.C.) the difference being that in S.I.C. the incomplete parts suggest contexts, feeling tones, qualities and attitude and specific objects or areas of attention. From psychological point of view Shore's test is important.

Stein devised a Sentence Completion Test as an aid in the selection of officers of strategic services personnel during the war. It attempted to elicit information on the following points; family, past drives, inner states, goals, cathexes, energy, time perspective, reaction to others and reaction of others to the subject. Symonds used this type of test in the Strategic Services Assessment Programme. The following points were studied: persistence, striving for success, feelings of inferiority, doubt and worry, depression and discouragement following failure, high standards, and emotional stability in stressful situations. Rotter and Willerman used this very method as an

evaluative technique and claimed a fairly high validity for this technique. Their incomplete sentence test (I.S.T.) was used as a screening device in Army-Air Force convalescent Hospitals. Joseph M. Sacks and other psychologists of the New York Veterans Administration Mental Hygiene Service designed a sentence completion test to obtain significant clinical material regarding the family, sex, ideas of inter-personal relationships of the family members and others towards the patient and the self-concept of the patient. The author devised a 'Sentence Completion Test' consisting of 99 incomplete sentences to study how far the B.T. students of the Government Training College, Jullundur, were adjusted to their environments. The subject was required to complete those sentences as quickly as possible. The sentences selected are such as touched upon nearly every aspect of a student's life in the Government Training College, Jullundur. They attempt to explore significant areas of the student's adjustment. For example, there are sentences designed to elicit interpersonal relationships of the subjects towards their family members, friends and relatives. They attempt to determine their attitude towards college, hostel or residence, opposite sex and teaching profession. They try to find out their main drives, worries, annoyances, fears and troubles. They endeavour to tap information about their health, economic condition, studies etc.

(vii) **The Drawing Completion Test**

Horn-Hellersberg Test. This test was originally devised by Carl Horn, an Art teacher of the Rochester Athenaeum and Mechanics Institute, Rochester, New York. He took the various lines in the blanks from famous paintings. Dr. Elizabeth Hellersberg standardised it as a personality test, used for testing the 'Individual's Relation to Reality' and as an instrument for social, cultural and individual diagnosis. The author standardised this test for measuring Imagination and Emotional Maturity of the Post-Graduate Teacher Trainees.

Horn Hellersberg test consists of three sheets having four rectangles on each and a fourth sheet having a blank rectangle. All rectangles on the first three pages have quite haphazard lines. The subject is required to make something meaningful from these lines. An effort has been made to measure the level

of imagination and emotional maturity of the subject from a study of what he makes. The subjects showing more of originality and less of common place objects have been classed higher in imagination from those who draw more common-place objects. Similarly subjects whose drawings are characterised by a high quality of form accuracy, organisation and combination of elements with enlivening of the sketches and lot of variety have been classed higher in imagination than those who show vague form and poor organisation in their drawings. As regards maturity, the levels have been determined by the number of human responses shown in the drawings. The production of a good many human responses, has been taken to be a criterion for a higher level of maturity. Whereas a good many animal drawings have been taken to mean a lack of capacity for creativity and, therefore, has been assigned a lower level of maturity.

In order to test the reliability of the H.H. Test as a measure of imagination and maturity, a parallel form has been used. The co-efficients of reliability for imagination and maturity when $N=60$, are 0.64 and 0.62, which are fairly high and prove the test to be a reliable one.

For validity, the Rorschach test was used. The two validity co-efficients of correlation for imagination and maturity for a sample of 50 are 0.78 and 0.69 respectively, thus establishing the validity of the H.H. test as a measure of imagination and maturity.

A second hypothesis has been tested that imagination and maturity are indicative of success in teaching. The co-efficients of correlation between levels in imagination and maturity on the H.H. test on the one hand and the levels in skill in teaching on the other have been calculated. The summary of the results is as follows :—

Co-efficients of correlation between levels of imagination H.H. Test and levels in skill in teaching when N is 133 = 0.71 and coefficient of correlation between levels of Emotional Maturity on H.H. test and levels in skill in teaching when N is 133 = 0.80.

The results prove the hypothesis that imagination and maturity as measured by H.H. test are indicative of success in teaching.

In conclusion it may be said that Imagination and Emotional Maturity are two important aspects of teaching personality since they are good indicators of teaching success. So while selecting teachers, besides other things, these two aspects of personality must be borne in mind. So far our selection of teachers, has been based purely on academic records, but the personality traits have hardly been taken note of. The present test fulfils that need. It places in the hands of the educationist a reliable and valid tool for measuring the desirable personality traits of successful teachers.

The definition of 'Imagination' as given in the 'Columbia Encyclopaedia' runs as 'The production of new images, *i.e.* images which are created by mixing or combination of other images or ideas (of which the sensory perceptions have never been experienced).' According to James Drever, 'Imagination is the constructive though not necessarily creative employment of past perceptual experience revived as images in a present perceptual experience at the ideational level which is not in its totality a reproduction of a past experience, but a new organisation of material derived from a past experience, such construction is either creative or imitative, being creative when self-initiated and self-organised and imitative when following a construction initiated and organised by another.' The researcher, however, by 'Imagination' here means the power to create new ideas.

By 'Emotional Maturity', the researcher means a balanced personality. It means ability to govern disturbing emotions, steadiness and endurance under pressure, tolerance and freedom from neurotic tendencies.

By success in teaching, the researcher means doing well in the teaching profession especially in the practical field that is to be most effective in the teaching work.

Of course, while talking of imagination as power to create new ideas, the production of fantasies is automatically excluded from good imagination, since imagination here has been taken to mean an active process of the mind and not a passive one as in the case of fantasy.

During the past few years, a number of other projective techniques have been devised. Plastic materials have been used

for projective analysis. Doll play has also been used by children for projective purposes. Some of these worth-mentioning projective tests are as follows :—

- (1) The Rosenweing Picture-Frustration Test.
- (2) 'Drawing of the Human Figure' Test.
- (3) The Bender Visual Motor Gestalt Test.
- (4) The Szondi Test.'
- (5) Sargent's Paper-Pencil Projective Method.
- (6) Story Telling and Completion Methods.
- (7) The H.T.P. Technique.
- (8) The World Test.
- (9) The Mosaic Test.
- (10) Mira Myokinetic Psychodiagnosis.
- (11) The Tautophone Method.

The Rosenweing Picture-Frustration Study (P.F.). It is a controlled projective technique. It tries to study the reactions of the subjects to typical stress situations. To study as the individual reacts to frustrations, is the main purpose of this test. The stimulus situations are all of a frustrating nature. The characters are shown without any facial expression or posture and do not suggest any particular reaction. It is assumed that the subject while responding identifies himself with the frustrated character. So the P.F. records are interpreted on the assumption that a subject's responses are a projection of what his overt reactions would be in situations that are depicted in the pictures.

Administration. The subject is given the test booklet and the examiner reads over the instructions with him: "In each of the pictures in this leaflet two people are shown talking to each other. The words said by one person are always given. Imagine what the other person in the picture would answer and write in the blank box the first reply that comes into your mind. Work as fast as you can." The booklet is then opened, the first situation is read and is explained. The subject is then asked to tell the first thing he thinks of that the frustrated person might say. When he has answered, he is told to write his reply in the balloon over the frustrated character's head. He is then asked to proceed to deal with the other items in the

same way. There are two forms of the test—one for adults and the other for children under 14 years. Each form of the test consists of a series of 24 cartoon-like drawings representing incidents of everyday life. In each picture, one character is shown saying something of frustrating significance to another.

Scoring. Responses are studied with a view to find out the direction in which aggressive reactions are made and for the type of reaction displayed. They are classified under nine scoring factors :—

- (1) Aggression is expressed towards the environment—extrapunitive.
- (2) Aggression is turned inward against the self—intropunitive.
- (3) Aggression is suppressed and glossed over—impunitive, etc.

In each case it is indicated whether the response represents :

- (a) Blocking at the point of frustration itself (obstacle dominance).
- (b) Defence against the ego-threatening qualities of the situation, usually in the form of assignment of blame (ego-defence).
- (c) Drive towards solution of the problem (need-persistence).

Interpretation. In order to interpret a subject's responses, it is compared with available norms for comparable subjects. The norms for the children's PF are based on the records of 256 children from the age of four to thirteen years. The norms for the Adult's PF are based on the records of 460 normal adults, 236 males and 224 females from the age of 20 to 29. Extrapunitive responses are most frequent both in the Adult PF and for the children's Form. The intropunitive reactions are the least common on most records. Ego-defence is the most often used type of reaction. The need persistence and obstacle dominant scores come next in order. Need persistent responses are more frequent in the records of older children. Extrapunitive responses become less and less frequent as children grow older. The mean number of extrapunitive responses for the 4-5 year old group is equal to 56 per cent of a total record, while at the 12-13 year-old level, only 40 per cent of the responses fall in the extrapunitive category. The intropunitive

and impulsive reactions are more frequent in older groups than the younger groups.

(2) **The Bender Visual Motor Gestalt Test.** The theory underlying this test depends upon Gestalt psychology. Most of the figures used are derived from Wertheimer's configurations. The test consists of nine designs drawn on a piece of white cardboard.

The instructions to the subject are: "Here are some figures (or designs) for you to copy. Just copy them as you see them." The subject is told that he will be shown nine cards with simple designs on them. The subject is allowed to erase if he likes but he is not allowed to use any mechanical device for making these drawings. The cards are presented in definite order. First figure 'A' is given and then figures 1 to 8 in order. The behaviour of the individual during the test is noted.

The interpretation of this test is based on the principles of Gestalt. Bender standardized this test as a performance test for children. According to her a child of about 7 years age should be able to reproduce figures A and 5 accurately. By the age of ten, he should be able to draw accurately all figures except figure 7.

(3) **Drawing of the 'Human Figure' Test.** The subject is given a medium-soft pencil, an eraser and a sheet of blank paper. He is told to draw a person. After the subject has drawn one, he is asked to draw the opposite sex. The subject is then requested to make up a story about the person he has drawn. This test, like other projective tests, is interpreted with other supplementary data. The "draw-a-person" method has been used for subjects of all ages and clinical conditions. When the subject loses rational control because of organic brain disease or functional psychosis, he draws distorted, inconsistent or disproportionate organs of the body. When the drawing in which the subject has projected himself, is different from his race, age and sex, some difficulty in normal identifications is apprehended.

(4) **The Szondi Test.** The Szondi test was prepared by a Hungarian psychiatrist named Lipot Szondi. The test consists of 48 cards having portraits of individuals representing the following eight psychiatric diagnoses:

- | | | | |
|----------------------|-----------------|------|-----------------|
| (i) Homosexual (h) | (v) Catatonic | (k) |] Schizophrenia |
| (ii) Sadist (S) | (vi) Paranoid | (p) | |
| (iii) Epileptic (E) | (vii) Depressed | (d) | |
| (iv) Hysterical (hy) | (viii) Manic | (m). | |

These 48 cards are divided into six sets of eight cards each. All the above-mentioned diagnoses are represented. On the back of each card are initials (h, s, e, hy, k, p, d, m) giving a diagnosis of the patient depicted in the portrait. The cards are numbered from 1 to 8.

Administration. The subject sits facing the examiner. The cards of the first set are laid flat on the table.

The subject is then given these instructions: "Pick out the two pictures you like best (or most)." After he has made the selection, he is told: "Now, select the two you dislike the most." The same procedure is followed for the remaining five sets. The results of selections or rejections are recorded for each set. A graphic representation of the results, in the form of a profile, is made. This profile is analysed and interpreted. The administration of Szondi test is simple, yet its interpretation is quite complicated.

Szondi test succeeds in revealing the private world of the person taking the test. It tries to lay bare the dynamics of his basic needs and drives without his knowledge, because he does not know how his performance is going to be interpreted.

(5) Sergeant's Paper-Pencil Projective Method. It was designed by Sergeant. There is a sort of atmosphere set up so that the subject can project. There are carefully selected situations involving a person of the same sex as the subject. The subject is required to write or relate answers to the questions. What did he or she do and why? How did he or she feel?

The subject is presented with a set of 15 situations called 'armatures'. One such situation is reproduced below *verbatim* :—

Armature VI: A young man discovers that a girl to whom he is engaged has had a very bad reputation in the past.

(a) What did he do and why?

(b) How did he feel?

The different situations try to elicit information about different areas of adjustment *e.g.*, family, opposite sex, social

life and friendships, religion and opinion, and vocations and health.

(6) **Story-telling and Completion Methods.** Story-telling method has been very usefully employed with children. Child's special areas of conflict—anxieties, wish-fulfilment, fantasies, fears, cathexes, needs etc. are tapped successfully by this method. The principles underlying the interpretation of these stories are the same as in TAT and CAT. The general principle is: 'Given a stimulus that allows freedom of association, the individual will draw upon his own background of experiences, wishes, needs, conflicts etc. in organizing and constructing his response in so far as he is willing and able to cooperate in the activity proposed.

(7) **The H.T.P. Technique.** This technique was devised by Buck. The subject is required to make freehand drawings of House, Tree, and Person. The subject is first asked to draw the three objects and he is given complete freedom to perform this task. Then the subject is asked to define, describe, and interpret the objects that he has drawn. The test is of interest because of its clinical usefulness.

(8) **The World Test.** Most of the work on this test has been done by Bolgar and Fischer. The material consists of 232 pieces belonging to the following fifteen categories—houses, trees, fences, common people, uniformed people, dogs, farm animals, wild animals, bridges, automobiles, trains, boats, planes, soldiers, and details such as lamp posts and soft drink stands. The subject is provided with this material and is asked to use it in an atmosphere of freedom.

Six[areas of reactions are noted. They are—

- (i) *Choice.* What objects are first chosen?
- (ii) *Quantity.* Under this heading amount, variety and space used are noted.
- (iii) *Form.* The following are common forms (a) geometric; (b) perspective; (c) use of the foundation; (d) direction and (e) symmetry.
- (iv) *Content.*
- (v) *Behaviour.*
- (vi) *Verbalizations.*

(9) **The Mosaic Test.** Margaret Lowenfield of London devised this test in 1929. There are 465 small wooden pieces of different colours and shapes. The subject is asked to make anything that he likes out of the given pieces. The basic assumption of this test is as follows :

"The basic assumption is here made that important defects in the achievement of a recognizable gestalt in the Mosaic Test situation correlates with and reflects significant defects in the basic personality structure of the subject."

(10) **Mira Myokinetic Psychodiagnosis.** Mira devised this test. His basic working hypothesis is "Every mental attitude is accompanied by a muscular attitude, owing to the unity of the living subject." He in this method tried to provide an objective measure of dominant conative trends of personality as expressed in the individuals' basic attitudes of reaction."

The subject is made to sit in a comfortable chair in front of a table. A wooden board 12"×15" is placed before him and on this is pinned a white sheet of paper. The instructions are :

"I am going to ask you to draw some lines in order to detect the accuracy of your movements. Hold this pencil in your right hand and draw ten lines like this one (E draws a horizontal line 5 cms. long). Before you start, I must tell you that you are to draw all of them the same length, parallel and as close together as possible, starting and ending on the same level like this (E draws two more lines below the model). You are not allowed to draw these lines as if you are writing, resting your wrist on the table. Your hand must be free and should move loosely, with its movement directed by the forearm just as I am showing you now. You can, if you want to, move your hand along the paper when drawing, provided you do not fix it and you do not attempt to make movements with your fingers like this. Of course it would be very easy for you to do it just as I have told you, but in order to increase the difficulty, you are not allowed to see what you are doing. So, I will blindfold you with this handkerchief and you will have to keep on drawing merely guided by your feelings and without any possibility of visual control. Remember, you will draw the lines from left to right, one beneath the other and as close, equal, and parallel as possible."

Forty lines are drawn in this manner—20 by each hand, 10 from left to right, and 10 from right to left. The subject is also asked to draw similar sets in the vertical and sagittal planes. The subject is also asked to draw zig-zag lines, interlocking chains, situations etc.

In interpreting, Mira assumes that right hand expresses what is actually present in the person's mind and the left hand is indicative of the constitutional trends. Upward movements are indicative of elated moods and downward movements to depression etc.

(11) **The Tautophone Method.** Here audition has been utilised for projective purposes. The apparatus used is a phonograph record on which is recorded a man's voice saying different things which are rather unclear. The record is played a number of times and the subject is asked to form an idea of what is being said. Interpretation is based on such variables as complexity of structure of response, closeness or remoteness of the response to the stimulus, non-English responses, personal references, sentence structures, predominant content of the responses etc.

A LIST OF PERSONALITY TESTS THAT HAVE BEEN ADAPTED OR STANDARDISED IN INDIA

I. NON-PROJECTIVE

<i>Sl. No.</i>	<i>Name of the Test</i>	<i>Author</i>	<i>Language</i>	<i>Age or Grade</i>
1.	Personality inventory in Hindi (Group)	U.P. Bureau	Hindi	14-20 years
2.	Edwards Personal Preference Schedule (Group)	R.P. Bhatnagar	Hindi	13-Adulthood
3.	Vyaktitva-Parakh Prashnavali (Group)	M.S.L. Saxena	Hindi	11-Adulthood
4.	Hindi Adaptation of Bell's Adjustment Inventory (Group)	Guidance Bureau, Patna.	Hindi	16-22 years

<i>Sl. No.</i>	<i>Name of the Test</i>	<i>Author</i>	<i>Language</i>	<i>Age or Grade</i>
5.	Adjustment Inventory (Group)	H.S. Asthana	Hindi	H.S. College
6.	Aligarh Adjustment Inventory (Group)	A. Jamil Qadir	Urdu	College and University
7.	Attitudes and Adjustment Inventory (Group)	S. Sultan Akhtar	Hindi & Urdu	For Drivers and Conductors
8.	Student Problem Check-List (Group)	E.V.G. Centre, Aligarh	English	College and University
9.	I.P.P. Personality Inventory (Individual)	K.K. Roy	English	15-30 years
10.	Personality Inventory (Individual)	T.E. Shanmugam	Tamil	12-18 years
11.	Personality Inventory for Teachers (Group)	Research Bureau, Calcutta	Bengali	Adults
12.	Youth Inventory (Group)	P.T. Raval	Gujarati	13 ⁺ -19 ⁺
13.	Youth Problem Inventory (Group)	S.S. Kulkarni	Marathi	13-14 years
14.	Bell's Adjustment Inventory (Group)	Karkare and Keskar (I.V.G. Bombay)	Marathi	X class
15.	Tests of Temperament and Character	B.K. Sohoni	Marathi	14-16 Boys
16.	Testing of Temperament and Character of children	B.K. Sohoni	Marathi	14-16 Boys
17.	Socio-economic Status Scale (Group)	B. Kuppuswami	English	School and College Stds. and Adults

<i>Sl. No.</i>	<i>Name of the Test</i>	<i>Author</i>	<i>Language</i>	<i>Age or Grade</i>
18.	Wrenn's Study Habit Inventory (Group)	Guidance Bureau, Patna	Hindi	H.S. Students
19.	Emotional Maturity Scale (Group)	A. Jamil Qadir, S. Sultan Akhtar and Feroze Gazni	Hindi	College and University Students
20.	Children's Sociometric Test (Group)	Shib K. Mitra A.A. Khatri and Sybil David	Hindi	8-15 years
21.	An Investigation to Study Human Relationship in Secondary Schools (Group)	R.S. Thakur	English	14-18 years
22.	A Sociometric Study of Friendship in Schools (Group)	P.H. Dalal	Gujarati	11-18 years
23.	Personality Inventory for Post-Graduate Teacher Trainees	N.L. Dosajh	English	Adults
24.	A Test of Personality Adjustment for Post-Graduate Teacher Trainees	N.L. Dosajh	English	Adults

II. PROJECTIVE

1.	Children Apperception of Personality (Individual)	U.P. Bureau	Hindi	Upto 10 years
2.	Indian Adaptation of Bellak's C.A.T. (Individual)	Uma Chaudhary	—	3-10 years

<i>Sl. No.</i>	<i>Name of the Test</i>	<i>Author</i>	<i>Language</i>	<i>Age or Grade</i>
3.	Indian Adaptation of Rosenzweig's P.F. Study for Children (Group)	Udai Pareek	—	5-12 years
4.	Indian Adaptation of Murray's TAT (Individual)	U.P. Bureau	Hindi	10 years onwards
5.	Evaluation of Personality Traits through TAT Pictures (Group)	Research Bureau, Calcutta	Bengali	Adults.
6.	Rorschach Test of Personality (Individual)	—	Hindi	for all ages
7.	Mosaic Test (Individual)	U.P. Bureau	Hindi	upto 10 years
8.	World Test (Individual)	U.P. Bureau	Hindi	upto 10 years
9.	Word Association Tests (Individual)	U.P. Bureau	Hindi	for all ages
10.	Children's Word Chain Association Test (Group)	Shib K. Mitra, David, and Lolla Gudhan Lal	—	8-15 years
11.	Verbal Projection Tests	T.E. Shanmugam	Tamil	12-18 years
12.	Adaptation of Horn Hellersberg Test	N.L. Dosajh	—	Adults

INTEREST INVENTORIES

<i>Sl. No.</i>	<i>Name</i>	<i>Author</i>	<i>Language</i>	<i>Age or Grade</i>
1.	P.S.M. Interest Inventory	V.G. Bureau, Jabalpur	Hindi	13-18 years
2.	Vocational Preference Record	U.P. Bureau	Hindi	X to XII grade

<i>Sl. No.</i>	<i>Name of the Test</i>	<i>Author</i>	<i>Language</i>	<i>Age or Grade</i>
3.	Kuder Preference Record	Adapted by Patna Bureau	Hindi	16 onwards
4.	Interest Pattern of High School Boys	C.K. Verma	Hindi	High School Boys IX, X
5.	Interest Pattern of Junior High School Boys	B.P. Nigaon	Hindi	VI, VII, VIII grade boys only
6.	Interest Pattern of Adolescent Girls	Ravindra Nair	Hindi	12-13 years
7.	Curricular Interest Inventory	R.C. Das	Oriya	13-16 years
8.	Interest Record	S.B.L. Bhardwaj	English	Adult Graduates
9.	Reading Interests of Marathi Speaking Boys and Girls at Higher Secondary School Stage	Mrs. P. Manohar	Marathi	10-16 years
10.	Interest Inventory	Miss J. Mascarenhas	English and Marathi	14-18 years
11.	Inventory for Predicting Teacher Efficiency	M.S. Jayamma	Kannada	Primary School Teachers

ADOLESCENCE

WHAT IS ADOLESCENCE ?

Adolescence is a stage in the development of an individual which lies between childhood and adulthood. It is rather difficult to say, at what age does it commence and when does it terminate. There are so many factors that determine the age of onset of adolescence that it is difficult to give the exact age at which it begins. Climatic conditions, sex, constitutional factors, environmental conditions, racial and individual differences etc., all have their impact on the onset of adolescence. According to Hurlock the adolescence begins roughly at about the ages of 13-16 years and continues upto 17-21 years.

Adolescence is a period when the individual develops into a man or a woman. It is during this period that the sex glands begin to mature so as to function as reproductive organs. It is during this period that physical, intellectual, emotional, psycho-sexual, social, religious and moral maturity begins to take place. In fact there is all round development at its maximum. Let us discuss these various phases of development separately.

Physical Development. In the earlier stages of pre-adolescence, the pituitary gland, located under the base of the

brain, begins to increase its secretion of two hormones, the growth hormone and the gonadotropic hormone (Hurlock p. 36). The growth hormone speeds up growth in general and especially the skeletal growth. The legs and arms begin to increase in length. Later on lengthening of the trunk takes place. The second hormone slows down and finally stops this increase in height. Then also the ovaries in the female and the testes in the male begin to develop. One hormone known as gonadotropic stimulates this growth. The gonads secrete two important hormones, the sex hormones and a hormone which works in opposition to the growth hormone secreted by the pituitary. The net effect of these two hormones is the development of primary and secondary sex characteristics and thus lead to sexual maturity. The period of this sexual maturity has not yet been carefully determined. Shuttleworth showed that the average age for the onset of this period is different for different countries as shown below :—

<i>Country</i>	<i>Age at which generally sexual maturity takes place</i>
America	13.5 years
Canada	13.75 „
Central and South America,	14.25 „
Central Europe and India	
Philippines	15.1 „
North Europe, Scotland,	
China and Japan.	15.5 „

According to Shuttleworth, the average girl begins to show a spurt in height at about the age of 10, and reaches a peak in the speed of growth at 12.56 years. By the age of 16, the growth almost comes to a stop and is generally complete by 18.20 years of age. After about six months, growth in weight follows. Shuttleworth shows that boys begin to show some spurt in height by 11½ years, that the peak of the height spurt is reached between 14½ and 15 years, and that the boys almost attain full height by the age of 18 years. The weight increase among boys lags behind height increase. That is why in the initial stages the boys look rather slender. Due to the fact that girls begin to grow rapidly one to two years earlier than do the boys, they overtake boys. They look taller, age for age, from 10-14 years.

During this period bodily proportions change a good deal. Glands become more active. More sex hormones are liberated into the blood stream. Changes in the secretions of the other glands also take place. This upsets the whole balance of the glandular system, resulting in the disturbance of the emotional life of the adolescent. The ratio of the heart diameter to the artery diameter changes, thus causing increase in pulse rate and blood pressure. The adolescent's muscular strength increases. The capacity of the lungs becomes greater during this period until sexual maturity is reached. Skin pores increase in size but not so soon as do the sebaceous glands. That is why the pores often get clogged at this age.

Intellectual Development. During the period of adolescence, intelligence attains its maximum level. There are certain types of intellectual activities which the adolescent likes more than the others *e.g.* history, literature and art have a great appeal for the adolescent. The adolescent is extremely eager to express his own opinion on subjects of varied interests. He or she would like discussions and sometimes while discussing gets heated up. A group of adolescents discuss very enthusiastically practically all topics that happen to come their way from Philosophy to various kinds of tricks at cards. They are generally idealistic in their outlook and cannot tolerate anything less than idealism. They generally disagree with the grown-ups and would crave for framing themselves the rules, regulations, laws and codes of morality etc., since they generally express dissatisfaction with the existing ones. They like practical work rather than mere theory.

Emotional Development. This period has been designated as a period of stresses and strains. The tensions result from changed attitudes and interests, from physical and glandular changes. Adolescent is generally moody and sulky and bursts into tears at the slightest provocation especially the girls. Their feelings are easily hurt. Girls show a semi-hysterical behaviour whereas the boys are likely to show their resentment towards the world; while in a sulky mood they may sometimes exhibit outbursts of bad temper. Some psychologists believe that these physical and glandular changes are not responsible for the heightened emotionality of the adolescents. They say the explanation for this emotional tension among adolescents is due to the social conditions that surround them today. According

to them, the tension shown by adolescents simply points to the fact that they have not been properly prepared during their childhood to face the changed conditions of their lives. The adolescents need training and help in order to get adjusted to the new patterns of behaviour and social expectations. Those adolescents who had facilities for such help and training show less emotional tensions than others who never had any. Some of the characteristics of the adolescent emotions are the following :

(a) *They are intense.* When an adolescent falls in love, he does so passionately. When he hates someone, he hates strongly. When he meets with frustrations in his environments, he reacts to them very vigorously.

(b) *The adolescent emotions are not under control.* An adolescent when emotionally aroused simply bursts out and is unable to control his behaviour. Girls giggle when happy and weep when sad. The boys express their unpleasant emotions by looking sullen and gloomy. They may refuse to speak or to do whatever they are asked to do.

(c) *Adolescents are not consistent in their emotions.* The emotions of the adolescent fluctuate very frequently and quickly. Sometimes he is very happy and at another time he is extremely sad and all this happens in a very short time. When he is faced with an obstacle which he cannot overcome, his happy emotion may at once change into an emotion of sorrow.

(d) *Adolescent is generally moody.* The adolescent may not give vent to his emotional state and thus his emotions in that case remain pent up and may result in 'moods', which stay for quite a long period. The common emotions that are controlled are generally the unpleasant ones, like fear, anger or jealousy. So the moods resulting from the repression of these unpleasant emotions are morbid and gloomy in nature.

(e) *During adolescence emotions get strongly integrated into sentiments.* 'Group loyalty' patriotism, personal pride, family pride, reverence for aesthetics and kindness etc. are the most common sentiments that develop at this age. These sentiments often take a very strong shape.

Psycho-sexual Development. During adolescence, in females, changes in body contour, widening of the hips, enlargement of the breasts, growth of pubic and axillary hair and the

onset of menstruation take place. Among boys, loss of seminal fluid during sleep takes place.

Social Development. Social development is related to the emotional development. The adolescent sometimes withdraws from adults and even from playmates of his childhood. He generally begins to have one chum in whom he confides all secrets instead of having many deep friends. Due to self-consciousness, his behaviour is sometimes very clumsy. He sometimes antagonizes adults and teachers who try to assert themselves. He is a hero-worshipper and so the institutions dealing with adolescents, should try to give examples of the best possible heroes.

Religious Development. During this age the adolescent is likely to be influenced by religious teachings. Some sort of religious beliefs are formed during this period. During late adolescence, he begins to rebel against religion and his faith in the scientific attitude begins to strengthen. Faith begins to give place to reason.

Moral Development. In late adolescence, the adolescent generally sets up a code of morals which may sometimes be counter to society. Ultimately a stage comes when he begins to accept most of the customs and mores of his society.

During adolescence practically all adolescents have to face certain difficulties, some of which are as follows :

1. (a) *Menstruation among Girls.* Capacity for sexuality begins at this age. The girls begin to menstruate monthly during this period. Many taboos are found about this phenomenon among some of the primitive tribes. Some believe that the phenomenon is brought about by the biting of a snake or of a wild animal. Others think that it is because of having sexual relations with a god. Most of the ancient tribes believe that menstruation makes the woman dangerous to the man and that the man should not come in contact with her during this time. But it must be understood very clearly that menstruation is a normal psychological phenomenon. The loss of blood is very small and is soon made good. Girls sometimes get very much perturbed by menstruation unless they are conversant with their own anatomy and physiology and the meaning of menstruation. Some women get very much distressed when they see the discharge of blood from their bodies. This flow of blood normally conti-

nues for three or four days. Much of the worry accompanying the phenomenon of menstruation can be checked if the girls are made to understand that it is just a normal physiological process and that it happens to all women.

(b) *Nocturnal emissions in boys.* Just as girls begin to worry about menstruation, the boys get distressed when sometimes they have nocturnal emissions accompanied by erotic dreams.

Some of the boys feel that the loss of this fluid will weaken their bodies, others begin to think that they are suffering from a disease. In spite of a good deal of worry about this phenomenon, they do not discuss it with their parents, friends or other members of the family because they are rather ashamed of it. Thus they keep this worry repressed in their minds. If they are properly explained that it is a normal phenomenon and is just an indication of onset of puberty, much of their worry would be removed. They should know that occasional discharge of this fluid during sleep is not in any way harmful to the individual and should not in any way be a cause for worry.

2. Since adolescence is a period lying between childhood and adulthood, the adolescent is sometimes at a loss to decide whether he should behave like children or like grown-ups. So sometimes we find that his behaviour is very childlike and at another time, he likes to advise others like the grown-ups.

3. *Adjustment to opposite sex.* It is at this period that the members of the two sexes begin to feel a little embarrassed in the presence of the members of their opposite sex. This is because of the awakening of the strong sex instinct. They have to learn as to how to behave towards the members of the opposite sex. To enable them to do so, social situations should be provided where adolescent boys and girls get a chance to mix up with each other. Games, sports, dramatics and other social activities should be organised so that adolescents—both boys and girls get a chance of working shoulder to shoulder with each other. This will lead to their healthy adjustment.

4. Adolescents sometimes begin to have phobias of suffering from tuberculosis, cancer, heart-disease or of becoming insane. The girls sometimes begin to have dreams of being pursued by a man, of being hurt by an animal or of being run over.

Adolescents may dream of falling from heights or of missing the train. These are all indications of unmanageable sexual or aggressive drives. In such a case the adolescent should be given proper attention by the parents, teachers and doctors.

5. During the period of adolescence individuals begin to think about the future choice of their professions. Sometimes they find themselves incapable of making a decision. They begin to waver as to the choice of their future professions. Left to themselves they find themselves like a boat without a rudder. If guidance facilities are provided, the adolescents will be saved from many of their worries.

6. During the period of adolescence, sometimes the learning capacity is temporarily affected adversely. Suddenly there is a fall in the examination scores, but then gradually they return to the normal. But sometimes certain adolescents never return to their original level. Such adolescents show signs of absent-mindedness and lack of ambition. Sometimes such adolescents become very aggressive, dominating and quarrelling. Such a state of affair is generally the result of some conflict, especially concerning sex, which the adolescent is not able to resolve.

7. During adolescence, some such difficulties as truancy, day-dreaming etc., may also make their appearance. These are generally due to the fact that the adolescent may not have been graded properly in the school. If his intelligence or physical level are different from those of his class-fellows he will not be well-adjusted and so may become a truant or a day-dreamer. In such cases, individual help should be provided to help him to adjust in the school.

8. Sometimes the parents are very demanding and want the child to study beyond his capacity. They are anxious to see their children coming out successful with flying colours and therefore force them to study at the cost of their other activities like games and hobbies etc. The adolescent in that case gets frustrated and he starts doing poorly in his school work.

9. Sometimes some problems during adolescence arise because of certain worries, which affect their studies. The adolescents generally are confronted with worries of two kinds—worries due to sex and worries due to their home circumstances. The adolescent might be indulging in a sexual practice like mastur-

bation and thus might be doing harm to himself. Or a girl might be afraid of her future role that of bearing children. The best way to deal with such worries is a frank discussion of these problems with the adolescent. Knowledge about healthy sex life will go a long way in alleviating these worries. Sometimes constant quarrels between the various members in the family may adversely affect the studies of the adolescent.

Suggestions for Helping the Adolescents. Guidance centres for the purpose should be started at various suitable places. Courses covering the topics of development, changes during adolescence, care and hygiene of the body, mental health of the adolescent, sex education, dietetics, social life etc. should be provided for the adolescents. The school curriculum should be such as to meet the present and future needs of the adolescents. Ample provision should be made for healthy, creative and social activities. The school and college atmosphere should be more on democratic lines where a good deal of responsibility is thrown on the shoulders of the adolescents. Parents should co-operate with the school and college staff in helping the adolescents in solving their difficulties. They should provide good hygienic conditions to the adolescents at home. The home atmosphere should be free from any sort of tensions. The parents should be made to understand the psychology of adolescence, so that they know that an adolescent should be treated as a responsible human being, who deserves certain privileges and full sympathy from them.

DIAGNOSTIC AND REMEDIAL TECHNIQUES

In order to discover the difficulties of an individual, we have to make use of certain techniques which may be designated as diagnostic techniques. Diagnosis means 'seeing through' and is absolutely essential before any other step is taken. The remedial techniques, by which we mean techniques to help the individual to get out of the difficulties, only follow afterwards. According to Carl R. Rogers there are levels of diagnosis. First level is 'description and classification' of the difficulty, for example, we might say it is a case of a 'problem child'. At second level of diagnosis, some accurate measurements are made and the individual is allotted a definite position on a scale, for example, we might say after administering the tests, that the individual is a borderline defective. The last step is to see the causal relationships of the factors that are responsible for the etiology of the trouble, for example, we might ascribe the child's truancy from the school to his improper grading or backwardness in intelligence or a lower economic status or any such thing. This last step helps us finally to suggest the remedial techniques.

Some of the diagnostic techniques are as follows :—

1. **Observation.** This is the technique that the teacher

employs most frequently. In class-room and outside, the teacher can note all behaviours that deviate from the normal. For example, there might be a student who cannot sit still in the class-room, or cannot see clearly the writing on the black-board or who shows signs of hard hearing etc. In fact, it will be excellent if the teacher could keep a diary wherein he could jot down his day-to-day observations about each of his wards and that too in a pre-planned manner.

Observation as a tool for diagnosis is only useful if conducted by a trained observer. A trained observer looks at things in the most objective manner. In order to be able to do that, the observer must be an emotionally balanced person and should be free from bias or prejudice. His sense organs should be absolutely normal and he should be quick to observe things.

2. Physical Examination. Physical examination means a thorough medical examination by a well-qualified doctor. Eyes, ears, nose, throat, lungs, heart and other organs should be examined at regular intervals. This periodical physical check-up forms an important diagnostic technique.

3. Class-room School Tests and Examinations. They form another important diagnostic technique especially in the area of the studies. Standardised tests are very useful for the purpose since they tell us how far does the individual deviate from the norms of his group and thus help in the diagnostic work. Standardised tests for all the subjects of the curriculum should be administered so as to determine the specific areas of difficulty of the individual.

4. Tests of Intelligence. Intelligence tests can act as very good tools for diagnosis. Supernormal and sub-normal individuals can be easily earmarked for differential treatment suited to their needs. The curriculum can be adjusted to the intelligence level of the individuals. Even the teaching methods can be adapted to the intelligence level of the students. In fact intelligence tests can be used for various purposes e.g. classification of the students or for the diagnosis of the specific difficulties or failures of the individuals. They are also helpful in educational and vocational guidance.

5. Aptitude Tests. Whereas intelligence tests measure

the general level of ability, the aptitude tests measure specific abilities.

6. Personality Tests. They measure an individual's personality traits and help us in diagnosing the personality difficulties if any. They also measure an individual's degree of adjustment to his environments.

7. Personality Rating Techniques. Personality ratings can be done by others, like teachers, friends, relatives, superiors or by oneself. The results if tally, can give a fair indication about the personality traits of an individual. Personality rating techniques, if employed, should be interpreted with a little caution. This must be borne in mind that the individual's personality patterns are not static but keep on changing according to the environments and experiences through which the individual passes. Hence the personality ratings vary with time. Ratings of personality traits at a particular moment can be done with the help of rating scales, questionnaires, self-inventories, attitude tests, personal data sheets, interest inventories, score cards, and character analysis charts etc.

8. Word Association Method. This is one of the oldest techniques for measuring personality. Jung used this method for his clinical work for diagnosing the various complexes in a particular individual. Different words associated with the different experiences in one's life are spoken one after the other and the responses are noted. The response time and the nature of the responses are studied in order to evaluate the personality traits.

9. Case Study Method. In this method information concerning practically every phase of an individual's life is collected. The information may be obtained from say records of school progress, from health records and charts, by observation or by interview etc. Generally a case study contains information on the following points: Full address, family, health, home environments, social and economic status, intelligence, school progress, work history, social behaviour, interests, sex life if any, interpretation of the data secured and recommendations, etc.

10. The Interview Technique. In an interview there is generally one interviewer and one interviewee. The trained and

skilful interviewer is able tractfully and sympathetically to elicit information about the various phases of an individual's life. Of course this becomes possible only if the interviewer succeeds in winning the confidence of the interviewee. The interview is generally kept controlled intelligently by the interviewer so as to check rambling about. Interviewing is a very specialised technique which only develops after a good deal of training and practice.

11. Sociometric Technique. This is a technique which helps us in seeing children in their social relationships and thus helps us to locate the isolates and also to study the formation of cliques among school children. The fundamental principle of this method is observing children in their social surroundings as distinct from individual children in interview rooms. Here an endeavour is made to study how the child influences the group and *vice-versa*.

The technique is very simple. For example, we can ask each pupil in the class to give his first, second and third choices of friends from his class, for various social activities *e.g.*, for playing together, for going on a picnic, for eating together, for staging a drama or for studying together and so on. From the answers given, we can come to know the social acceptance or rejection of the individual. So sociometry may be called the science dealing with the social acceptances and rejections of the individual among their peers. Sociometric test is a device to evaluate pupil's behaviour. Such tests give us information about the place of the individual within the group and about the group behaviour as influenced by various members of the group. Suppose there are ten persons in a group, and we carry out the sociometric test. We ask each member to give three names in order of preference from amongst the group in answer to the question : Whom would you like to play with ? Let us further suppose that the ten persons are : A, B, C, D, E, F, G, H, I and J and further I, II and III represent first choice, second choice and third choice received.

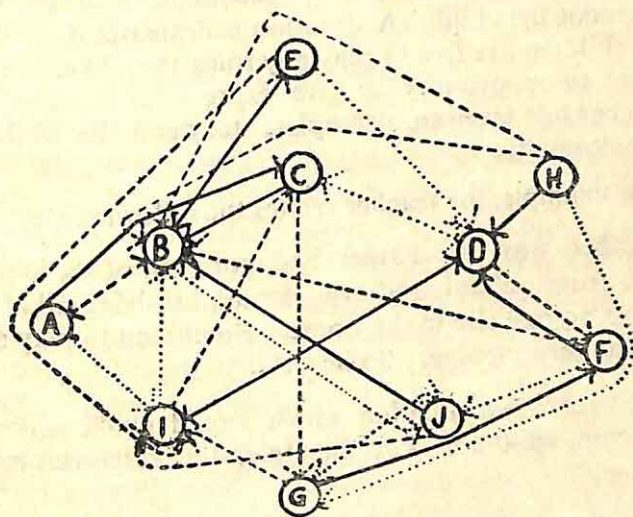
Question. Whom would you like to play with ?

	A	B	C	D	E	F	G	H	I	J
A		II	I						III	
B	I				II					III
C		I		III			II			
D			III			II			I	
E		I		III					II	
F		II		I						III
G						I			II	III
H		II		I			III			
I		III	II	I						
J		I					III		II	
I Choices	1	3	1	3		1			1	
II Choices		3	1		1	1	1		3	
III Choices		1	1	2			2		1	3
Total Choices	1	7	3	5	1	2	3		5	3
Sociometric Score	5	25	9	17	3	8	5		15	3

Now the result of the test may be tabulated as follows :—

The sociometric score has been calculated by giving arbitrary values to I, II and III choices. Here the I choice has been given a score of 5, II choice 3, and III choice 1. So naturally sociometric score of individual A = $5+0+0=5$, that of B = $3 \times 5 + 3 \times 3 + 1 \times 1 = 25$ and so on. The whole data can also be conveniently represented by a sociogram. A sociogram represents in a graphical way the mutual relationships within a group.

A sociogram can help the guidance worker in the following way :—



Sociogram

(1) It is a good method for the selection of leaders for the various activities of the class. For example,

B and D can be good leaders in the said group.

(2) The maladjusted children and isolates can be easily detected. The cause or causes of their maladjustment can be traced out and remedial measures applied. They can then be placed in suitable groups for the social therapeutic purposes. The results of the placement can be easily judged from the sociograms prepared subsequently. In the example above, 'H' is an isolate.

(3) The social status of each child in the class can be studied and properly evaluated.

(4) The degree of correlation between sociometric scores and marks obtained in other fields can be calculated. This would often give very useful results.

(5) The formation of various cliques in the class at different times and for different purposes and the mobility of these cliques can be easily studied from sociograms.

(6) The changes in the reputation of the leaders of the class can be easily observed from the sociograms.

12. **Sociodrama.** With this technique also we get information about the child. A situation is dramatized on the stage and the children are free to play any roles they like, thus providing them an opportunity to give expression to their feelings. The teacher just gives an incomplete story and the children are asked to dramatise it.

For example, the teacher relates the following story :—

Mother was ill. Father had gone out of station. Ramu returned from school and saw her mother lying ill in the bed. There was no one else in the house. Ramu had to play a hockey match that very evening. So he

Now there is a situation which would evoke different responses from children. For example, the responses may be as follows :—

(1) Ramu should have cancelled his appointment and stayed at home.

(2) Ramu should have informed the doctor but should have kept his appointment.

(3) Ramu should have consulted his mother.

(4) Ramu should not have bothered much about the illness of the mother and so on.

Thus the students should be made to express themselves freely and their remarks should be noted down. These remarks will throw a good deal of light about their cultural background, training, value formation and feelings about different people.

The teacher can so direct the conversation that it ultimately leads to the formation of right attitudes among the members of the group. Thus role playing or sociodrama can be used in helping individuals to break their wrong attitudes and the formation of right ones.

Although a number of techniques have been discussed yet no one technique supplies all the necessary data for the diagnostic purposes. In fact a number of techniques are used in proper combination so as to eliminate errors arising due to personal prejudices and due to testing conditions etc. In fact if a number of techniques are used and the data secured by various techniques inter-correlate highly then the results secured are more reliable and accurate.

REMEDIAL TECHNIQUES

1. **Play Technique.** Practically all the difficulties are the result of certain emotional disturbances or because of the repression of certain urges, resulting in a tension in the mind. In the remedial play technique an opportunity is provided to the child so that he can give expression to his repressed emotions. An attitude of friendliness is maintained throughout. The child feels free to give expression to his emotions on the play-things lying in front of him. In case the child feels hesitant, he is encouraged to express himself.

The remedial value of play lies in the fact that during play the child gives expression to his feelings and problems. The play material facilitates this process. Repressed feelings are vented out. During play, attempt is made to obtain as much information about the child as possible. The most common play material that should be provided are toys, clay, plasticine, paints, pencils, crayons, cans, water, sand, blocks, toy animals, toy soldiers, masks, doll's houses and doll's furniture. The first step is to establish rapport with the child. The area for play should be fixed and strictly adhered to. The child should be given complete freedom to do and say what he wishes. The child must be given due importance and he should be made to feel that he is the master of the situation. No one tells him what to do or what to say. The specialist should however, respond to his feelings and emotions. The child must be made to feel that he is accepted as he is. The specialist must

never rush through or should never expect speedy results. During the play this is observed whether the child's play is in any way abnormal. His approach to toys, his behaviour during play and his emotions must be watched. Does he freely express himself or is he inhibited? Does the child get excited? Is his play in conformity with his age? What toys does the child choose? What toys does he reject? Does he construct or destroy? How long does the tendency persist? Can the child concentrate on certain activities? If so, how long?

Dr. David Levy had done splendid work in this field. He treated children with the help of dolls. According to him, the doll, whose limbs can be amputated and can again be put back is extremely useful for the remedial work. The child acquires certain anti feelings towards the elders which he expresses on the dolls. For a while the child takes these dolls to be the elders against whom he has anti-feelings and thus gives vent to his anti-feelings on the dolls and thus feels relieved. In Dr. Levy's method three dolls are placed before the child—one doll represents the mother and is metallic, having his breast made of clay. Its arms and legs can be amputated and refixed. The second doll represents babies and children and is made of celluloid. This doll is placed in the hands of the mother-doll. Then there is a third doll having the same sex as the child. Now the child is at full liberty to play as he likes. The other play material is also placed along with. The child, then, is asked as to what these dolls are doing. Then the child, somehow or other, is made to ventilate his feelings. These dolls are placed before him a number of times. Whatever the child says about these dolls is jotted down and these responses are analysed. Some conclusions emerge at once. Gradually the child begins to ventilate his inimical feelings. Some children start beating these dolls and thus give vent to their anger. It has been observed that those children who met with obstacles in sucking their mothers during babyhood, they beat the breasts of the mother doll and express their anger towards the baby doll too. When the child is properly instigated he might crush the baby doll and amputate the limbs of the mother doll. In order to clarify Dr. Levy's method an example is quoted below.

A boy aged four years had a sister one year old. This boy used to have night terrors. He behaved in a very timid manner

towards other children, but in the beginning he was very aggressive. He had feelings of friendship towards his younger sister especially when he was alone. But if his parents showed affection toward her, he atonce got annoyed. In the play he would beat the baby doll and the mother doll.

2. Drawing Technique or Art Therapy. In this technique the child is encouraged to draw or paint something and to draw or paint whatever comes in his mind and thus he is made to express his feelings. The child has a tendency to express his fears and annoyances on the things around him or on the drawings that he makes or in other words he projects his fears etc. on him.

The techniques enumerated above may be designated as expressive therapies, because the attempt in these techniques is to make the child give expression to his repressed feelings. In these very techniques, we can include sociodrama as well, which will be dealt with under the heading 'Group Therapy'.

The behaviour during drawing and painting can throw a good deal of light on the personality make-up. The things to be observed are whether the child erases very often. Does he say that he cannot draw well? Is he very careful about the details? The answers to these questions in the affirmative are indicative of feelings of inferiority and general dissatisfaction with self. When the child is very careful of the details it is generally a sign of worry and perfectionism. Of course such conclusions should not be drawn from one or two drawings or paintings. But a sequence of drawings over a long period of time may be indicative of maladjustment.

Generally it is not the drawing that is so important as the causal remarks that the child makes while drawing. Drawing and painting have a great remedial value as they provide an opportunity for emotional release. Also there is a sense of achievement accompanied by a good deal of motoricity. Moreover, by providing recreation, they go a long way in adjusting the child to his environments. A clinician can use this very technique for strengthening the ego, for releasing the unconscious fears, anxieties and repressions.

3. Bibliotherapy. It is a remedial technique based on the principle that reading material should be provided to

the subject to fit his pressing needs. For this purpose there should be all sorts of books tackling the various problems. For example, if an adolescent is worried about 'sex matters', books on 'Sex Education' will appeal to him the most. So if he is provided such books, it is very likely that by going through them he will automatically overcome his difficulty. In order to carry out a programme of bibliotherapy, it is first necessary to find out the need of the individual. Then an atmosphere of study should be provided where the child can satisfy his needs of reading unhindered. Then also guidance in effective reading should be provided. Discussions, dramatisations and other learning activities should follow such readings.

4. **Interpretive Therapy.** In this technique the individual is made to understand as to what the abnormality is in his behaviour and the reason behind that. Once the individual understands his abnormalities he is helped to overcome them gradually.

5. **Treatment through Modifying the Environment.** One of the common techniques is to transplant the individual completely from one environment to the other. For example, if the emotional tensions in the home are at the root of the unsatisfactory behaviour of the child, the child in that case may be removed from there and may be placed in a 'Foster Home', where the environmental conditions are quite congenial. Such a remedial technique may sometimes provide emotional security and anchorage to the child which are so necessary for his development. In this case it is important that the 'Foster Parents' should show an intelligent and sympathetic understanding of the child's nature. The atmosphere should be that of affection and satisfaction in the development of the child. The child's attachment to his own family is a very important element in determining whether or not his adjustment will be possible in a foster home. Where the emotional attachment of the child with his parents is not very strong, foster home placement becomes an easy affair. Where the emotional bond is very strong, the placement in a foster home becomes a very difficult affair.

6. **Group Therapy.** Under this heading we propose to discuss the remedial techniques where the individual learns new ways of living as a result of group influence. Here personal

problems are solved, behaviour is reordered through the impact of group influence. Such a technique is very useful because in a very short time, it can help many individuals. While in a group the problems of one individual are discussed and solved, the others having similar problems automatically take a clue and are indirectly helped to solve their own problems. In this technique the child is placed in a group where he can face actual social situations that is where he can play and work with others and during this process automatically shapes his behaviour in such a way that it becomes normal. A class in a school is a good example of this technique provided the number of children in the class is small and social interaction between its various members is feasible.

Such a technique is not helpful to all maladjusted boys and girls. Extreme cases of maladjustment like psychotics and psychopaths rarely benefit from such a technique because of severe behaviour disorders. Only cases which have difficulties because they could not get a chance to have adequate social contacts or could not get a chance to express themselves anywhere, benefit the most from this type of therapy. The maladjusted children, who have a sense of failure because of repeated failures, get a feeling of success with this technique and are thus restored to normality. In the group such individuals are made to create and assert according to their capacities. Recognition, praise and encouragement are given for all constructive tasks done. While participating in the group activities, the maladjusted child experiences release through some form of activity and interaction with others. Useful activity helps in releasing emotional pressures provided they receive appreciation.

7. Sociodrama. Sociodrama is a form of group guidance. It is also called role playing. In this technique the individuals play role in a special social situation. For example, a story connected with the lives of children might be left incomplete and the children are then encouraged to finish the story by role-playing. The children are free to choose their roles and act and say in any manner they like. Then through directed discussions socially accepted values and ideas are introduced. Sociodrama helps one to find out one's attitudes, beliefs and interests etc. It provides a convenient means of giving expression to one's pent up emotions and helps one in finding out solution to one's problems.

PUPIL ADJUSTMENT AND THE TEACHER

The problems of pupil adjustment resolve themselves to three aspects—first adapting the learning situations and learning processes to the individual needs of children; second, making the child adjust to the demands of the society in which he is born and in which he lives ; and thirdly teacher's own personality as far as it affects the pupil adjustment. Now taking all these together we find that no two children are alike. Though the basic pattern of development is nearly the same yet there are many individual differences. Hence in the learning situations the teacher has to take cognizance of these individual differences. Most of the children could be classed as normal but quite a few would deviate significantly from the norm. The various types of deviations can be : (1) Social deviates like rebellious, obstinate, negativistic, sullen, sulky, egotist, jealous, suspicious, cruel, morose, fearful, coward, oversensitive, bullying, boisterous, quarrelsome, destructive, truants, sexually perverted, indecent, vulgar etc. (2) Nervous or neurotic children like epileptics and prepsychotics etc. (3) Psychoneurotics having minor personality difficulties such as fears, phobias, feelings of inferiority, emotional conflict, obsessions, compulsions, and guilt feelings

etc. (4) Physical deviate like malnourished, anaemic, and tuberculous children etc. And lastly exceptionally bright or talented children. Now for all these deviates as long as they exist in the school, the teacher has to find out ways and means to adjust them to the school situations. There can be different factors both in the home and the school that can be responsible for the incidence of these maladjustments, and with which the teacher can deal with to a great extent and help these deviates in adjustment. Some such factors are failure in the examinations, social disapproval, withholding of promotions and rewards, reproofs, criticisms, threats, isolation, tense emotional surroundings, anxiety, irritability on the part of elders, frustrations, insecurity, lack of self-confidence, despair, hatred and resentment. It is these causes that the teacher can reckon with to a great extent. And the success of a teacher lies more in how far he can help the children in overcoming these causes of their maladjustment rather than merely helping the children in their scholastic achievement.

Every child whether deviating or normal must receive the attention of the teacher. The teacher is responsible for providing the children under his care some sort of guidance and sympathetic handling of the various maladjustments. It is his duty to adjust the methods of instruction to the needs of the individual, which would mean individual attention. Mass methods of education are of no use in helping children to adjust. Such being the expectations from a good teacher, it directly follows that the teacher training should be in line with the said expectations. In training programme less emphasis should be placed on the subject-matter but greater stress should be put on courses dealing with the personality maladjustments, mental hygiene, processes of child development and maturation, psychology of exceptional and handicapped children, clinical and abnormal psychology and diagnostic and remedial work.

Teacher's own mental health is extremely important while considering the problem of pupil adjustment, since a maladjusted teacher instead of helping the pupils in adjustment makes them maladjusted. So the mental health of a teacher is extremely important not only for his own self but more for the sake of the students under his charge. Neurotic traits in the teacher unconsciously infiltrate to the students. An anxious teacher un-

knowingly makes his students anxious. Similarly an ill-tempered teacher creates an atmosphere of tenseness around him, whereas a mentally healthy teacher creates an atmosphere of confidence and affection around him.

Now how can the teacher's mental health be ensured. Before we discuss this point it would perhaps be quite pertinent to ask what causes mental ill-health or in other words what is the etiology of mental troubles. Very briefly, mental ill-health arises from causes either within the individual or around him. Or both the constitutional make-up and the environmental forces play their part in causing mental ill-health. As far as the environmental factors are concerned, the individual, the institution and the state or the society can help a good deal in keeping them congenial for the teacher. For example, there are some fundamental needs of the teacher which must be met in order to achieve balance in life. These needs are physical, emotional, social, intellectual and spiritual. In brief the teacher needs a home, friends, a good philosophy of life, a secure well paid job, a field for expression and recognition from his fellow beings. Some of these needs are instinctual and the others acquired. Now the needs have got to be within one's means. If they get out of proportion they disturb the balance of one's mind and make one maladjusted in life. Then in order that the teacher may be able to keep himself mentally healthy, he must know himself as completely as possible. He must know his potentialities and limitations. Then the institutions should provide to the teachers adequate wages, fair terms of service, security, due respect, more freedom in the planning of their work and less imposition from above. Then there should be facilities for adequate recreation, healthy activities like sports, hobbies, excursions etc., in order to ensure the mental health of the teachers.

THE ROLE OF THE TEACHER IN A PROGRAMME OF GUIDANCE

Guidance is a part and parcel of education. In fact education itself is mostly guidance. So a teacher who is responsible for the education of the children is in a more advantageous position for the guidance of its pupils. In the present state of affairs in this country, when very little has been done for the organisation of guidance services the entire responsibility for the guidance of the children falls upon the shoulders of the teachers. How far the teachers are discharging this duty or how far they

are capable of doing so are separate questions. But supposing the guidance services have been provided *i.e.*, the Central and Regional Guidance Bureaus have been instituted and schools have their own centres for guidance, then, what role can the teacher play in this programme of guidance and how ?

The teacher is in direct contact with the students. He has many opportunities to observe his students from very close range in diverse fields and for continuous and long period. So his observations can be extremely useful for guidance purposes provided these observations have been made very systematically and methodically and are appropriately recorded. They will be reliable still more if the teacher is trained in the techniques of observations and interviewing. Also if he is conversant with the techniques and tools for the collection of data, his services for the guidance programme can be extremely valuable. Further, if he knows the remedial techniques he can make use of them for therapeutic purposes. Techniques like Sociodrama and Art therapy can go a long way in helping the teacher in dealing with minor cases of maladjustment in his class. Further if he is a little wide-awake and knows something about various careers and courses open to students, he can render a great assistance to his students in planning out their future careers. Of course, with all the other duties of the school that of teaching, organisation and planning, we cannot expect much from him by way of regular guidance work, but he can do whatever little he can in an incidental way. He, of course, in no case can take the place of specialists like the school counsellor, psychiatric social worker or any other personnel of the guidance services.

Now let us see how can the teacher play his part with the maximum efficiency in a programme of guidance. Firstly by maintaining a cumulative record for each child under his care, he can provide a great help to the school counsellor. Secondly in the staff meeting and faculty meetings he can gather information about his wards from his other colleagues. During parent-teacher conferences he can play a double role one of gathering information about the home life of the children under his care from their parents and the other of passing on information about the children to their parents, thus indirectly exercising a little check on the home environments of the children. Parent-teacher conferences, if they are well planned out, can help a good deal

in the collection of data about the children and about the various activities of the school, and thus they bring closer co-operation between the home and the school which is extremely useful for the healthy bringing up of the children. Such conferences thus can go a long way in the adjustment of the children both in the school and in the home.

The teacher can also provide opportunities to his students for successful achievement by providing satisfying tasks to them if he allocates work that is within the capacity of the child to achieve, it would give the child a sense of achievement. Such a procedure, if it is applied to problem children or handicapped children, it would act therapeutically. Then there are other ways which he can adopt if he likes to help the children in adjustment.

(a) By placing them in suitable groups—If the child is placed in the proper group for the type of ability which he has, there is less likelihood of his developing any problems.

(b) By giving adequate opportunities for expression to the talented children—Children having talents of music, painting, speaking etc., if they are provided opportunities for expression will feel more satisfied and adjusted to their environments.

(c) Last but by no means the least, the teacher by simply maintaining an affectional attitude, inculcates in the children a feeling of security, which is very important for the proper adjustment of the child.

So we can end up by saying that the teacher's role in the guidance programme is, though not of a specialist, yet it is extremely important and essential for proper adjustment of the child.

STUDENT PERSONNEL SERVICES

The term 'Student Personnel Services' is applied to such programmes at the college and university level that at the school stage come under the term 'Educational and Vocational Guidance'. The need for 'Student Personnel Services' is even more important than the Educational and Vocational Guidance at the school level. This programme needs Counselling and Guidance specialists in addition to the members of the teaching staff.

The present instances of unrest in the country and especially cases of indiscipline amongst students, are due to the fact that the Student Personnel Services programme has so far been totally neglected in the country. The main functions of the colleges and universities so far have been concentration on academic programmes preparing students mostly for the university examinations. Hardly any attention has been paid to the personal problems of the students. The relationship between the teachers and the students in colleges and universities has been of a formal type. There are rarely any occasions of intimate contact between the teacher and the taught. The situation has been further deteriorated because of the

increasing number of the staff members with the result that the student-teacher ratio has gone down. This condition has been further worsened because of the fact that the methods employed for teaching in the colleges and universities are far from satisfactory. The main emphasis is on the Lecture Method and there is a good deal of evidence to show that the lecture method without an opportunity for discussion is one of the least effective methods of instruction.

The conditions prevailing outside the campus of the colleges and the universities present a very woeful picture of indiscipline in the society. Even the persons at the helm of affairs especially the political leaders indulge in acts of all sorts of indiscipline which has a very deleterious effect on the growing youth. The defective examination system in turn is another malady. There is a set syllabus and the whole stuff has to be crammed by the students. In order to overcome these maladies an effective and sound programme of 'Student Personnel Services' is a necessity. There is no doubt that the cases of student indiscipline are very complex, yet if we are able, to provide a sound programme of 'Student Personnel Services' the malady can be remedied to a great extent. When we talk of a sound programme of Student Personnel Services we mean that a programme should be so specific that it can ensure the selection of the most able and emotionally stable candidates for higher education. Apart from providing adequate and positive outlets for the youthful energies it will look to the physical and mental health of the students. All programmes should be manned by persons who have least problems of their own. These persons should be fully equipped so as to help the students in planning their future careers. The personnel should be such who understand the students and have a human touch in dealing with their problems.

The various functions of the Student Personnel Services can be the following :—

(i) **Admissions.** There is a great rush for higher education. Most of the students wish to join a college or a university. This haphazard rush for higher education can be controlled through a programme of selective admissions *i.e.*, only persons who are adequately qualified and equipped with the required mental

calibre, aptitude, interests and intelligence may be allowed to go for higher education. The others could be diverted to professional and vocational courses according to their mental make-up. This programme of channelization of students to university courses, professional and vocational courses can only be effective if we have a very sound programme of 'Student Personnel Services' available to our student community.

(ii) **Student Records.** At the moment there is hardly a system of maintaining records of the achievements, strong and weak points of the students. Academic records are generally retained in the Registrar's Office which only mention grades or marks obtained in the various university examinations. This is not enough if we really want to help the student community for their proper growth. In fact the student records should include not only test scores but biographical information, their achievements in co-curricular activities, the various recommendations and the counselling interviews provided to the students so that when the students graduate or withdraw from the institutions, the authorities should have a complete information about the various aspects of the personality of the students. Such complete records can help employees and employers in making a proper selection and this ensures right man at the right place.

(iii) **Orientation.** Another important function that these 'Student Personnel Services' can perform is that at the beginning of every academic year an orientation course can be arranged which can help a new student in adjustment to his new environments in the college or the university with a minimum intellectual, emotional and social disruption. Such a programme can include welcoming the new students with speeches, and introduction of the members of the faculty and university employees. It can include a programme of examination, testing the level of General Knowledge of the students, their abilities, interests to determine possibilities for advanced placement or for remedial work. This programme can also include a conference between the Faculty Advisors and the students which would be the beginning of a relationship between the teacher and the taught, so essential for the further development of the students. This programme can also include many other activities of the campus of the college or the University with

special reference to the use of the library. Such a programme provides feeling of security to the new comers by removing some of his doubts etc.

Student Activities

The Student Personnel Services can look to the organization of various student activities especially co-curricular ones in the college or the university.

At present very little attention is paid to the student activities. Most of the attention is directed towards preparation for examinations as if they are the be all and end all of education.

Other aspects more vital and useful for the all round development of the students, for example, education on sex problems, knowledge of the students about their various abilities and weak points etc., are generally neglected by the Faculty members of colleges and the Universities.

Counselling Services

Another important programme that the 'Student Personnel Services' can take in hand is the provision of counselling services which would mean especially trained staff for the purpose. Without adequately trained personnel it is dangerous to start these counselling services. Professionally trained counsellors need to be added to the staff of such institutions. Most of the difficulties of the students regarding their academic and personal difficulties will be overcome if these counselling services are provided. Also with the help of the members of the staff the counselling services can help the students in Educational and Vocational planning.

Placement

The 'Student Personnel Programme' should also look to the placement of its students after they have completed their education. At the moment the institutions hardly take note of this with the result that sometimes the students who pass through these institutions have to wander about in search of suitable jobs. The introduction of programmes of placement in India at the moment seems quite difficult because most of the vacancies are filled through family ties, emotional factors, social status, social pressures etc., rather than according to training and merit of the persons. Such a state of affair is very dangerous

because it has resulted in placement of persons on jobs for which they are not qualified which in turn has resulted in a great deterioration of the standards and efficiency. This proper placement of personnel in accordance with their merit and training is not possible unless this malady prevalent in our society is removed.

Health Services

The 'Student Personnel Programme' should also include in its purview the health services of the student community. Centralized health services of the entire university or a college will go a long way in running this programme efficiently. All students on entry into a college or a university must be subjected to a medical check up and proper physical records should be maintained.

Alumni Organizations

The Student Personnel Programme should also include the setting up of Alumni Organizations in the universities and colleges. This would go a long way in establishing contacts between the old students and their *alma mater*. This relationship is healthy both for the institutions and the students strengthening the institutions and providing a sense of security to students.

Remedial Services

Students in colleges and universities sometimes lack knowledge as to how to study with the result that sometimes they become backward not because of their poor intelligence but because of lack of information about their faulty methods of studying. If remedial services are provided, such cases of backwardness will be benefitted immensely.

'Student Personnel Services' cannot take the place of complete education but they do strengthen the programme of education. They certainly improve the quality of education. In a way they supplement the already existing programmes of education. The money spent on these services will go a long way in reducing the wastage in higher education and as a whole the return on account of these services would be much more in terms of a reduction in the wastage of student talent, reduction in the number of failures, reduction in cases of maladjustment of students, reduction in the number of unemployed among the youth and reduction in cases of frustrations and dejections amongst the student community.

OCCUPATIONAL INFORMATION

In order that a child may choose his career wisely, it is important that he should be in the know of the various openings before him. He must know the requirements for each profession that is academic qualifications, personality traits and experience required for it, nature of the work, emoluments, future prospects and so on. In order to supply this very much needed information to the child, the following measures can be adopted very easily :—

1. Imparting of such information to the children, especially at the 8th class level, should form a part of the school curriculum. For example, imparting of such information can easily be included in the subject of 'Social Studies'.
2. Special classes can be held in order to impart this information about various courses and careers.
3. We can arrange trips to various places where the students actually come in contact with the people of different professions and especially when they are at work. The children should be allowed to see them actually at work.
4. We can invite persons belonging to different professions to come and give talks to children about the nature of their

work, the training needed, the qualifications required and how to obtain those qualifications etc.

5. Films about various professions *i.e.*, people at their actual work—can be shown to children in the schools.

6. Library can be equipped with all sorts of information about the various professions. Leaflets, posters, monographs, filmstrips, and other such material about the various professions can be easily displayed in the school library and the children should have a free access to them.

7. The officers of the Employment Exchanges should occasionally give talks to children in the school informing them about the various prospective openings and various job requirements etc.

THE OCCUPATIONAL INFORMATION (O.I.) AND EMPLOYMENT MARKET INFORMATION (E.M.I.) PROGRAMME

The O.I. and E.M.I. programmes being conducted by the Employment Service Organisation are closely related to the scheme of Vocational Guidance. The data collected under these programmes provide useful material for guidance workers regarding occupational opportunities and the employment trends. An understanding of the scope and organisation of these schemes would therefore be helpful.

The O.I. Programme

The O.I. unit at the Directorate General of Employment and Training (D.G.E. & T.) collects and publishes O.I. of all India importance and applicability. This literature furnishes the Youth Employment Officers and the Adult Counsellors with an accurate picture of the tasks and requirements of jobs and vocations, training and experience which lead to them, and it is of material help in guiding juveniles in selecting careers suited to them with ultimate object of leading them to gainful employment. In fact the O.I. material is produced primarily for the sake of vocational guidance and employment counselling service, although once produced, it is utilised for many other purposes. The following are the more important reference materials produced by the O.I. unit at the Headquarters :—

(i) **N.C.O.** It is a list of all important occupations in the country, grouped according to the internationally accepted

classification principles. For each occupation is given a code number, standard and alternative titles, and a short definition or description will contain an alphabetical index for easy reference and use.

(ii) **O.F.R.** Out of the 76 groups of the N.C.O., it has been divided to bring out 60 O.F.R.'s in order to provide :

- (a) A general background of occupational and industrial knowledge.
- (b) Basic specified information of all-India importance and validity on the work performed, the training regarding wages, and prospects in respect of occupations within each occupational group.

(iii) **Occupational Specifications and Interview Aids.** It is a series of publications which give additional, more detailed information on selected individual occupations. They provide helpful guidance points with applicants and employers and for efficient and selection work and to provide the necessary information for the specialised counselling work at the Y.E.O.S. and E.E.'s.

(iv) **Guide to Careers also called Career Pamphlets.** It is folder type publication covering the following points :

- (a) The work performed.
- (b) Personnel qualities required.
- (c) Training requirements and facilities.
- (d) Opinion available.
- (e) Ways and entry.
- (f) Prospects for advancement.
- (g) Wages.
- (h) The employment outlook.
- (i) Contacts for further information.

(v) **Handbook on Training Facilities in India.** It gives sufficiently detailed information for counselling and guidance purposes on institutional training available in the country and leading to entry into specific occupations. For each institution, information is given regarding the different courses of study and their duration, admission requirements, nature and title of award, tuition fees, other costs, hostel facilities, month of commencement of course, etc.

State O.I. Units. These have two-fold functions :

- (a) To assist the Central O.I. Unit in its work and particularly to contribute to the All India information by verifying the data with conditions obtaining regionally, thereby facilitating compilation on an all-India basis.
- (b) To collect and disseminate on a State basis material of local importance to supplement information compiled on an all-India level.

The collection of material by Employment Exchanges concerning training facilities will be directed and guided by the State O.I. Units which will also be responsible for translating national reference material into important regional languages. The translation work will provide the State Units with an excellent opportunity to orientate the information in the light of the local conditions.

The Employment Exchange staff especially, at the Y.E.O.'s, school counsellors and others, often come across problems and questions relating to the field of O.T. which cannot be solved by a reference to the material provided to them. The reference material supplied to them must therefore be supplemented by the personal knowledge and experience gathered through the work of the E.S. and V.G. It must, however, be appreciated that all questions, not entered for in the material, cannot be answered at the local exchange level. It is, therefore, an important function of the State O.I. Units to receive and answer such questions.

The Employment Market Information Programme

Here the information collected under this programme differs from the occupational information as it is designed to reveal conditions and trends in the employment market, that is the demand and supply position in different occupations and industries. This type of information is also very useful to vocational guidance workers as they are expected to counsel their clients on the availability of jobs, prospects and outlook in different careers.

The Shiv Rao Committee has recommended a comprehensive programme for the collection of employment market information. The objectives of this programme are much

wider than to serve the needs of vocational guidance and employment counselling. Some of the other uses of employment market information can be stated as under :

- (a) The information is needed in the operation of the Employment Service itself.
- (b) The information is useful to the employers in different ways such as in deciding the location of new plants, in considering the availability of manpower before making capital investment, and in their personal management work.
- (c) Decisions regarding unemployment insurance are likely to be based on this information.
- (d) The information stimulates thinking in regard to the training needs of an area or a State in the light of change of employment opportunities or new developments and thus to help to relate training to the needs of industry.
- (e) The information is useful to the Government in determining priorities in regard to credit and other facilities for locating new plants and for increasing employment in other ways.
- (f) It gives planners an idea of the trades and occupations in the area—it leads to organise training for the workers in some new trades and occupations.
It gives planners an idea of the nature and type of employment at the beginning, middle and at the end of the plan and thus helps in evaluating the success of the plans.
- (g) In employment and placement services.
- (h) On the whole it reveals the qualitative and the quantitative aspect of unemployment.

The Headquarter Unit

The Central Unit for E.M.I. is responsible for conducting research involved in the methods of collection, standardisation of concepts in manpower and the employment market as also the coordination and statistical treatment of the data collected by the States etc. It is also charged with the duty of training employment officers in the collection and analysis of information.

The State Units for Employment Market Information

The State units are charged with manifold responsibilities involved in manpower and employment market information. However, their efforts for the present are directed to such objectives as obtaining accurate information about the distribution of the labour force changes in the level of employment, trends in the employment and requirements of skilled personnel. Their functions will be to establish and maintain procedures for the collection of employment information, to identify employment market within the State, to make estimates of the population of working age and of labour force in the employment market and to organise labour market studies on a local level.

Methods for the Collection of Employment Market Information

Information about employment in both private and public sectors are being collected by Employment Exchanges through what is known as an "establishment reporting system". Under this system, certain selected establishments will be contacted periodically to give details about the number of persons they are employing, the vacancies they have to fill and the type of workers they find in short supply.

The programme is organised and developed at three levels :

- (a) At Employment Exchanges where the issue of forms and collection of returns from employers establishments in the private and public sector is being done. Local scrutiny of the returns record and analysing in regard to certain aspects of the information collected is also made at this level and on completion of necessary action, the returns are forwarded to the S.E.M.E. Units.
- (b) At the semi-unit, where the examination and study of the returns and report record from the exchanges are made and the employment coverage is assessed. After scrutiny the returns record by the S.E.M.I. Unit are forwarded to the Headquarters unit.
- (c) At the Headquarters unit where the tabulation of the information contained in the returns is undertaken. Tabulations are returned to the S.E.M.I. Units for the compilation of reports of particular market areas.

SCHEME OF CLASSIFICATION OF OCCUPATIONAL INFORMATION MATERIALS

A. Administrators (n.e.c.)

0. Miscellaneous
1. Central Govt.
2. State Govt.
3. Local
4. Private
5. Autonomous institutes (including universities)

C. Commerce and Economics

0. Miscellaneous
1. Office work (including storekeepers use)
2. Accountancy and Auditing
3. Banking and Finance
4. Insurance
5. Business and Office Management
6. Cooperation
7. Selling
8. Commerce
9. Economics

D. Defence Forces

0. Miscellaneous
1. Army
2. Navy
3. Air Force

E. Excise & Customs

F. Fine Arts

0. Miscellaneous
1. Music, Dancing and Dramatics, Film-acting (Entertainment)
2. Drawing and Painting
3. Commercial Arts
 - (a) Miscellaneous
 - (b) Advertising
 - (c) Cartooning and Illustration Work
 - (d) Designing
 - (e) Decoration (Interior)
 - (f) Photography
 - (g) Audio-visual Aids
 - (h) Beauty-Culture

4. Sculpture, Clay modelling

Fi. Fire Service

0. Miscellaneous

G. General Education

0. Miscellaneous
1. Certificates
2. Diplomas
3. Degrees

H. Home Science

0. Miscellaneous
1. Domestic Science
2. Catering and Hotel Management

Lg. Languages

0. Miscellaneous
1. Linguistic (including Translation, Interpretation)
 - (a) Indian languages
 - (b) Foreign languages
2. Literary Work and Journalism

Li. Library Work, Archives Keeping and Museology

0. Miscellaneous
1. Library Work
2. Archives Keeping
3. Museology

M. Mathematics and Statistics

0. Miscellaneous
1. Mathematics
2. Statistics

P. Police Force

0. Miscellaneous

S. Sports and Physical Education

0. Miscellaneous
1. Sports
2. Physical Education

Sc. Science

- 0. Miscellaneous (Lab. Tech.)
- 1. Physical Sciences
 - (a) Miscellaneous
 - (b) Engineering and Technology
 - (c) Architecture, and Town Planning
 - (d) Pharmacy and Pharmaceutical Work
 - (e) Geology, Physical Geography, Geophysics, Geochemistry
 - (f) Meteorology
 - (g) Astronomy, Astrophysics
 - (h) Physics
 - (i) Chemistry
 - (j) Industrial Management
 - (k) Surveying
- 2. Biological Sciences
 - (a) Miscellaneous
 - (b) Agriculture, Forestry, Horticulture (excluding Agriculture, Engineering), Sericulture, Bee-keeping
 - (c) Animal Husbandry and Veterinary Science
 - (d) Botany
 - (e) Dairy Science
 - (f) Medicine, Health and Sanitation
 - (g) Zoology
 - (h) Fishery
 - (i) Agriculture based Industries
 - (j) Physiology, Biology, Anatomy

S.S. Social Science

- 0. Miscellaneous
- 1. Psychology and Guidance
- 2. Welfare Work
 - (a) Miscellaneous
 - (b) Social
 - (c) Medical
 - (d) Rural
 - (e) Family
 - (f) Women
 - (g) Labour

- (h) Mentally Retarded
- (i) Physically Retarded
- (j) Tribal

3. Legal and Judicial Service
4. History, Archaeology and Tourism
5. Human Geography
6. Political Science
7. Philosophy and Religion
8. Anthropology

T. Teaching

0. Miscellaneous (not elsewhere classifiable)
1. Nursery Certificate
2. Primary and Middle Diploma
3. Secondary Degree
4. College and University

Tc. Transport & Communications

0. Miscellaneous
1. Marine
2. Air
3. Rail
4. Motor
5. Road (excluding Motor)
6. Postal Service
7. Telegraph, Telecommunication Service

Tr. Trades & Crafts

1. *Building Trades & Construction* (excluding Carpenters)
(NCO 78 & 79)
 - (a) Painters and Paper Hangers (NCO 79)
 - (b) Masons, Brick Layers and related workers (NCO 79)
2. *Clay, Glass & Stone*
 - (a) Clay
 - (b) Glass
 - (c) Stone (NCO 81)

3. *Food & Beverages* (NCO 82)
 - (a) Millers, Crushers and Pressers (NCO 820-821)
 - (b) Bakers, Confectioners, Candy and Sweetmeat Makers (NCO 824)
 - (c) Dairy Workers (Non-farm), Makers of Aerated Water and Brewers
 - (d) Coffee and Tea Blenders and related workers (NCO 822, 825)
 - (e) Food Canners and related workers (NCO 826)
4. *Precision Instrument Technicians* (NCO 74, 855)
 - (a) Instrument Technicians including Watch and Lock Makers
 - (b) Jewellers, Goldsmiths, Silversmiths, Ivory Workers (NCO 741-742)
 - (c) Makers of Musical Instrument (NCO 855)
5. *Leather* (NCO 72, 855)
 - (a) Shoe Makers (NCO 720-721)
 - (b) Leather Goods Manufacture (excluding Footwear) (NCO 722-729)
 - (c) Leather Tanning Processors (NCO 853)
6. *Lumber and Wooden Furniture* (NCO 77, 442, 449)
 - (a) Loggers, Wood Cutters, Sawyers and Wood Working Machinists (NCO 442, 449, 772)
 - (b) Carpenters, Cabinet Makers, Joiners and Pattern Makers (Wood) (NCO 770, 775), Cane Workers
 - (c) Shipwrights, Boat Builders, Coach and Body Builders, Cart Builders and Wheelwrights (NCO 771, 775, 774)
7. *Mining, Quarrying, Mineral Processing* (NCO Div. 5)
8. *Paper* (NCO 80, 833, 834, 856)
 - (a) Typesetting Machine Operators, Compositors, Stereotypers (NCO 800, 801, 807)
 - (b) Printers (NCO 803, 804)
 - (c) Engravers, Block Makers, Photolitho Graphers (NCO 805, 806)
 - (d) Proof Readers and Copy Holders

- (e) Book Binders (NCO 808)
- (f) Paper Makers (NCO 833, 834)
- (g) Paper Product Makers (NCO 856)
- 9. *Chemical and related process workers* (excluding Paper Makers) (NCO 803, 831, 832, 839)
- 10. *Rubber* (NCO 850, 851)
- 11. *Textile and Jute* (NCO 70 and 71)
 - (a) Jute and Cloth Manufacture Spinners, Weavers, Knitters, Dyers, and related workers (NCO 71)
 - (b) Jute Goods and Clothing Manufacturers, Tailors, Cutters, and related workers (NCO 71)
- 12. *Tobacco* (NCO 84)
- 13. *Metals and Machinery* (NCO 73, 75, 85)
 - (a) Metal Processors, Furnacemen, Head Treaters, Rollers, Smiths, Moulders and Drawers (NCO 75) (excluding Goldsmiths and Jewellers)
 - (b) Tool Makers, Machinists, Plumbers, Welders, Platers and related workers (NCO 75)
 - (c) Machine Operators (Stationary Engines, Excavating and Lifting Equipment Operators) (NCO 87)
- 14. *Electricity* (NCO 76)
 - (a) Installers, Repairmen, Linemen, Cable Jointers (Electricity, Power, Telegraphy, Telephone) (NCO 763, 764)
 - (b) Assemblers, Fitters, and Repairmen, Electrical and Electronic Equipment (NCO 761, 762, 789)
 - (c) Electricians General
- 15. *Plastics* (NCO 952)
- 16. *Miscellaneous*
 - (a) Women (Occupations where women are preferred or which are more or less exclusively open to women)
 - (b) Handicapped
 - (c) Scheduled Caste
 - (d) Backward Classes
 - (e) Post-graduates
 - (f) Graduates and Under-graduates.

- (g) High/Higher Secondary School Leavers
- (h) Middle and Elementary School Leavers
- (i) Universities

Village and Cottage Industries

The need of developing rural industries is obvious since over 82% of the people live in the villages. No plan seeking to bring about the welfare of the people can remain indifferent without giving due consideration to these large numbers. India is a poor country, her per capita income being among the lowest in the world. Besides this there is wide disparity between urban and rural incomes. This inequality of income of the individuals in these two sectors is also significant. The poorest 10% of the population have a daily per capita expenditure of hardly 27 paise in the rural area. As many as 70% of the rural population can spend only 50 paise per day. Unemployment is very common in the rural areas. Agriculture is already over and uneconomic for many people.

Hence there is need to increase production, to provide gainful employment to the vast number of unemployed in the rural areas with a view to contribute to the growth of the national income and make agriculture economic through the reduction of pressure on land by diverting part of the population to occupations other than agriculture. It is also agreed upon by most people that it will take still years for the process of industrialization to reach all the people of this country. Meanwhile economic development and, from the special point of view of ensuring economic equality, the promotion of cottage or the village industries have become a national task.

Thus in India there should be deliberate attempts to develop the village industries specially as a means to provide employment and increase production. The need of it flows inevitably from the peculiar features of our national economy.

In most countries of the world, including the industrially advanced countries there is a small scale sector existing side by side with a large scale sector. The character of the small scale sector varies with the nature of the economy of the country in general. The size, technology, productive capacity of these industries also vary accordingly. Similarly the character of these industries in our own country too is bound to be deter-

mined by the nature of the available resources *i.e.* men and material.

Out of more than 5½ lakhs of villages, only about 43000 villages are estimated to have been electrified till the end of the Third Five Year Plan. Most of these are even of the population of 5000 people or above. While when we speak of the problem of villages in general in India we generally speak of habitations of each less than 5000 population. Thus the development of cottage or village industries have to be continued with more and more attention in context of the non-availability of power too for a long time to come.

It is on this account that our Government had also constituted an All India Khadi and Village Industries Board in 1953 under the direct control of the Government which was later reformed and put under the direct charge of a Commission with considerable powers of autonomy in 1957.

The following industries have been kept under the purview of this Commission :

1. Khadi
2. Processing of cereals and pulses
3. Ghani oil
4. Village leather
5. Cottage match
6. Gur and khandsari
7. Palm gur
8. Non-edible oils and soap
9. Hand made paper
10. Village pottery
11. Bee keeping
12. Fibre
13. Blacksmithy
14. Carpentry
15. Manufacture and use of methane seeds and manure
16. Limestones and its production.

Types of Assistance

The financial assistance provided by the Khadi and Village Industries Commission is of three types—grant, loan and

subsidy. The grant is an outright contribution to the institution engaged in Khadi and Village Industries to enable them to require equipments, to buy or construct godowns, workshops etc., and to meet the expenditure for setting up training facilities.

The subsidy is paid on the production and sale of Khadi and Ghani oil. Loan is paid to meet the requirements of the institutions and cooperatives for purchasing raw materials and for other requirements by way of working capital.

Rural Work Projects

The Khadi and Village Industries Commission has taken up the work of helping to rebuild the rural economy on the basis of self-help and mutual aid by organising the rural communities for a programme for the integrated development of rural economy, the basis of which will be agro-industrial instead of agricultural as it mainly is at present. Its main strength will be in the fullest utilisation of local resources in material and men and production of goods primarily for local consumption. Keeping this object in view emphasis is placed primarily on intensive efforts to secure integrated rural development of selected compact areas or *gram ekais* as a vital part of the integrated development programme for cottage industries.

It is proposed to organise 3000 rural units each covering a village or a group of villages having population of about 5000. Another distinguishing feature of this programme is the preparation of local plans for the maximum exploitation of the available resources for local use. In the recent past 1285 *gram ekais* were working. This Commission has also been trying to coordinate its activities with those of other agencies working in the rural areas for the welfare of the weaker sections of the population, so as to maximise the results obtainable from their efforts.

Small Scale Industries

An industry having fixed assets of Rs. 5 lacs or below comes under this category of the small scale industries.

It is necessary for a small industrialist to get his unit registered with the Directorate of Industries and Commerce or with Small Industries Service Institute. Thus he is able to get Government assistance, controlled raw materials, imported raw materials and components and is also able to participate in the Central Stores' purchase programme.

Some of the agencies assisting small scale industries in the various States are such as :

1. Small Industries Service Institutes
2. National Small Industries Corporation
3. Directorate of Industries and Commerce
4. State Bank of India
5. State Financial Corporation
6. State Small Industries Development Corporation

Small Industries Service Institutes assist the individuals in getting factory layouts, schemes, designs, blue prints etc. free of cost. These institutes also provide free technical assistance and guidance. They assist in selecting suitable industries, impart economic information about different small scale industries, give model schemes and survey reports etc. Some of these things are also provided by the Manager of Publications, Civil Lines, Delhi-6.

Small Industries Service Institutes also impart free training programme in industrial management and blue print reading etc. for the benefit of small scale enterprises. Extension centres attached to the Small Industries Service Institutes also impart training in trades like Machine shop, Foundry, Electroplating, Heat Treatment, Beads Manufacturing etc. Such training facilities are also available at the Production-cum-Training centres at such places as Okhla, Rajkot and Howrah etc. Training in leather industry is available at the Central Footwear Training Centres at Madras and Agra etc. For detailed information for the training in technical trades imparted at such centres, Small Industries Service Institutes can be contacted.

Generally stipends from Rs. 40 to Rs. 50 p.m. are paid to the trainees undergoing training at these Extension Centres and Production Centres or Production-cum-Training Centres.

Normally this training is provided for a period of six months.

A small enterpriser in this field can approach the State Director of Industries and Commerce for securing premises, power supply in Industrial Estates for establishing any industry. The machinery for the establishment of all such industries can be obtained on hire-purchase basis without much difficulty from the National Small Industries Corporation (123, Mount Road,

Madras). Small Industries can even be set up with foreign collaboration with prior permission of the Ministry of Industries and Commerce, Government of India.

Generally the terms on which the loans are granted and advanced by the State Government to Small Scale Units are :

1. Upto Rs. 1000 on personal bonds.
2. Upto Rs. 5000 against two surities.
3. Other loans are given at 65% of the security offered including assets created out of the loan.
4. Repayable in 10 years in easy instalments.
5. Rate of interest :
 - (a) 5% upto Rs. 25,000 for industrialists.
 - (b) 5% upto Rs. 2 lacs for industrial cooperatives.

Generally the Small Industries Service Institutes serve the industrialists or small enterprises in the following spheres :

1. Technical assistance
2. Laboratory facilities
3. Showing facilities (at nominal charge)
4. Training of managerial personnel
5. Training for workers
6. Economic information service
7. Library
8. Drawing and designing
9. Product development
10. Explain Government stores and purchase programmes.

THE WORLD OF WORK

Suddenly a taxi-driver turns round a corner of a street and bangs against a cart coming from the other side, because he is too slow to put the brakes on; and the result of his tardiness is disastrous. The taxi is smashed and the occupants—one dies at the spot and the rest are seriously injured. Now who is this taxi-driver? He is found to be a maladjusted person who has no liking for driving but has been forced to adopt this profession in this 'World of Work' for earning his livelihood. He is just a round peg in a square hole. If persons in this 'World of Work' are placed where they are most suited, accidents of the said type will occur rarely. For the sake of convenience, we may classify this 'World of Work' into the following areas of occupations:

1. Military *i.e.* air force, army and navy
2. Commerce *i.e.* clerical and secretarial
3. Technical and crafts
4. Medical and health services
5. Agriculture including horticulture, sericulture, veterinary, animal husbandry, fishery and forestry
6. Fine arts like music, dance, drama, painting, photography and sculptoring

7. Administrative *i.e.* executive and managerial
8. Communication and transport
9. Journalism and literature
10. Service occupations like insurance, travel agency, house-building, hotels and restaurants etc.
11. Social work
12. Education
13. Trade and commerce including advertisement etc.
14. Mining, quarrying etc.
15. Research etc.

Each of these group of professions requires a different type of intelligence, a different aptitude, different scholastic attainments, different personality traits and predispositions. According to a research study conducted in U.S.A., technical professions have been found to call for the highest intelligence and next in order come professions in the scientific, academic and commerce fields. Last of all come the trades. Regarding the types of intelligence careers of the authors, editors, executives, librarians, chief clerks, scientists, secretaries and teachers etc. require a high verbal intelligence. Careers like medicine, executive posts, inventors, lawyers, scientists, statesmen, supervisors, teachers and others need a high 'Reasoning Intelligence'. Careers of accountancy, bank teller, book-keeper, file clerk, sales clerk and statistician need a good 'Numerical Intelligence'. Actors, commentators, correspondence clerks, public relation men, reporters, salesmen, secretaries and writers etc. need to have a high fluency in language. Again actors, administrators, diplomats, public relations men, salesmen, store clerks, translators and writers should have a good memory. Artists, designers, electricians, carpenters, engineers, machine operators and pilots should be able to perceive sizes, shapes, and relations of objects in space. They should be able to think about objects in two and three dimensions. Also they should be able to manipulate objects in various positions mentally. Artists, craftsmen, file clerks, inspectors, machine operators, mail careers, proof readers and telephone operators must be able to locate details quickly. They should be competent enough to recognize likenesses and differences rapidly. Further artists, craftsmen, electricians, engineers, inventors, machine operators,

mechanics, truck-drivers and typists etc., should have good muscle control, dexterity, and coordination of the eye and hand.

Different types of work need different predispositions. For example, art work requires an inherent aesthetic urge, business work needs an inborn business acumen, social work demands a native capacity to establish rapport with other human beings. Real scientific work is only possible if one is possessed of a good reasoning power. Good teaching calls for imagination and emotional maturity and similarly music requires, besides other things, an ear that can discriminate between fine differences in notes and can apprehend harmony and rhythm. These predispositions are shaped with experience into aptitudes which manifest themselves round about the age of fifteen years but even after that age there are possibilities of slight changes in aptitudes. In fact human beings have the potentiality of changing and acquiring new interests throughout their lives.

Within the various professions, there exist gradations. What group of professions will be most suitable for a particular individual will be determined by his aptitude, but at what level of work that individual will operate in that group of professions, will depend upon his general level of intelligence. For example, suppose an individual has a mechanical aptitude. Now in the 'World of Work' whether he will prove a success as a mechanic or an overseer or an engineer or an inventor of machines will solely depend upon his level of intelligence.

Coming to the personality traits, it is found that for success in different professions in this 'World of Work' one needs to have different personality traits. Independent mindedness is important for professions where leadership is involved e.g. in creative arts, in research and in administrative jobs. Doggedness and persistence are required in all jobs, where some long projects are to be completed e.g. in doing a painting or carrying out a scientific experiment. Self-control is needed in professions where one is to work with people especially children without getting impatient or angry e.g. in teaching small children, handicapped and backward children, sympathy and compassion—that is being concerned about the welfare of others, are valuable in occupations dealing with the suffering, unfortunate and emotionally upset i.e. in nursing, medicine, social work, counselling and

teaching of handicapped etc. Similarly there are other personality traits which are essential for various other vocations. Space does not permit to name them all. The best that can be done is to name some of the personality traits that are generally helpful in all walks of life. These traits are : Cooperativeness, cheerfulness, consistency, willingness to take responsibility, imagination, emotional maturity, adaptability, generosity, self-sufficiency, placidity, conscientiousness, tactfulness, reliability, friendliness, good expression and wide interests. Some of the personality traits that are harmful for practically all professions are : Submissiveness, suspiciousness, selfishness, stubbornness, anxious nature, feeling of inferiority, over-conscientiousness, being inhibited, sensitiveness, dominative and demanding, tactlessness and getting easily discouraged. There are some groups of personality traits that are useful for certain specific occupations only *e.g.* imagination, organising capacity, tactfulness etc. are some of the personality traits very essential for a good administrator. Objective detachment and ability to tolerate others are very necessary for a social scientist. Similarly for each profession there are some definite groups of personality traits.

It is very difficult to give a complete and an exact picture of the world of work, since it is so changing with the times. Some fields of work are growing but others are declining. With the advancement of science and technology, new professions are emerging and some old ones are disappearing. So the occupational structure of the world is not a permanent one. The only thing that we can determine at a particular time is the trend of various professions.

Now let us have a peep into this 'World of Work' as it obtains in India. For the sake of simplicity of understanding various 'occupations' are classified under 'families'; 'families' are combined into 'groups', and 'groups' are assigned to 'divisions'. Our National Classification of Occupations as prepared in 1959 by Occupational Unit of the Directorate General of Resettlement and Employment, has 11 Divisions consisting of 75 Groups subdivided into 331 Families under which the individual occupations are classified. The eleven divisions are :

0. Professional, Technical and related workers
1. Administrative, Executive and Managerial Workers

2. Clerical and related workers.
3. Sales Workers
4. Farmers, Fishermen, Hunters, Loggers and related workers
5. Miners, Quarrymen and related workers
6. Workers in Transport and Communications Occupations
- 7-8. Craftsmen, Production Process Workers
9. Service, Sport and Recreation Workers
10. Workers not Classifiable by Occupation.

This national classification of occupations is continually changing since more and more occupations are added due to changes in techniques and scientific developments.

Now let us see the structure of the 'World of Work' as it obtains in our country especially with regard to Job Opportunities and Outturn.

Let us first take up the Engineering Profession. The total number of job opportunities for degree holders and diploma holders during the year 1965 was 19,024. The total outturn of engineers of all categories for the years 1963 and 1964 was 21,205 and 23,649 respectively. Actually there was an increase at all levels. It was more pronounced in case of diploma holders. The outturn in 1963 and 1964 taken together was the highest in respect of civil engineers, followed by mechanical and electrical engineers. As a whole the outturn of engineers was much in excess of the requirements of the country. This fact should have been taken note of by the authorities concerned with future planning of training and education programmes for engineers as early as 1965 and the number of seats in engineering colleges should have been reduced, without adding any more engineering colleges.

Let us next take up the profession of Technologists. More than half of the total vacancies of technology are in textile, printing, food and chemicals. The demand for textile technologists was the largest *i.e.* 27.7% and for printing, food and chemical technologists 11%, 10.7% and 9.3% respectively. The total outturn of technologists during the academic years 1963 and 1964 was 1,900. The largest outturn was in respect of textile technologists, the next in order were textile chemistry,

printing technology and chemical technology. The figures show that the outturn of technologists in the years 1963 and 1964 was more than adequate for the recruitment of technologists in 1965.

Let us next turn to the profession of Agriculture. Of 4,795 vacancies notified for agricultural scientists during the year 1965, the maximum demand was for Agronomists *i.e.* 1,267 (26.42% of the total vacancies). The demand for Veterinary Science and Animal Husbandry and Soil Science was 1,218 (25.40%) and 1,108 (23.11%) respectively. Vacancies for degree and diploma holders in Agricultural Botany constituted 4.32%, Horticulture 3.34%, Agricultural Chemistry 2.81%, Agricultural Entomology 2.38%, Dairy Science 2.40%. If we compare the job opportunities available in the profession of Agriculture in the year 1965 with the outturn in 1963 and 1964, we can roughly say that by and large the demand for graduates and post-graduates in Dairy Science was more than the supply. Again in view of the fact that priority has been given to agricultural development in the Fourth Plan, there is a possibility of increased demand for graduates and post-graduates in various branches of Agriculture.

Let us now turn to the Medical Profession. Among the medical and allied personnel, the total number of vacancies notified during the year 1965 was 5,268—the demand for physicians was 3,034 or 58% of the total vacancies. Next to them were the vacancies notified for Nurses (10%), Medical Specialists (9%), Pharmacists (9%) and Vaidis (8%). The outturn of medical personnel has been increasing from 4,752 in 1962 to 5,943 in 1963 and to 6,103 in 1964. On comparing the job opportunities available in 1965 and the outturn in 1963 and 1964 in the profession, we find that the number of vacancies for dental surgeons appear to have increased in 1965 as compared to those of the previous year. The demand for the surgeons and those possessing M.D./Ph.D. degrees in specialised fields appears to be also increasing. On account of the increased emphasis on public health, family planning and greater outlay on medical and health services, the demand for medical personnel will continue to increase.

Now turning our attention to the profession of Natural Scientists, we find that 5,225 vacancies were available for natural

scientists during 1965. Of them, 32% were for post-graduates in Chemistry and 22% for Physics, 8% for Botany, 10% for Zoology, 3.4% for Geology, 2.5% for Biochemistry and 10% for Physiology. In Geophysics, Meteorology, Microbiology, Oceanography, the vacancies were less than 1% of the total. The outturn of post-graduates in natural sciences in 1963 and 1964 was 4,423 and 4,695 respectively. The highest outturn in natural science subjects was in Chemistry 1,415 in 1963 and 1,583 in 1964. Studying the supply and demand position in this profession, it appears that the supply is not keeping pace with the demand in the fields of Chemistry, Bio-chemistry, Microbiology, Physics and Physiology. On the other hand, the supply appears to be more than the demand in the fields of Zoology, Geology and Oceanography.

Let us now divert our attention to the profession of Social Scientists and Teachers. The total number of vacancies for Social Scientists and Teachers notified during the year 1965 was 18,670. Of course the maximum demand was for teachers 13,197 (71%). The demands in the fields of Mathematics, Economics and Statistics accounted for nearly 17%, in Accountancy 4%, Law 3% and Labour and Social Welfare 2.56% of the total. In the fields of Anthropology and Psychology, the demand was less than 1% of the total. The number of persons who obtained post-graduate degrees in social sciences and teachers was 38,644 in 1963 and 39,236 in 1964. Studying the supply and demand position, it may be safely said that, by and large, the supply is more than sufficient to meet the demand in almost all the fields. It appears that the supply in the fields of Economics, Law and Mathematics appears to be more than the demand. In Chartered and Cost Accountancy there appears to be a little better scope for employment.

Lastly, let us see the position with regard to degree and diploma holders in Fine/Commercial Arts, Journalism, Library Science, Music, Secretaryship, Business Management and other fields. The total number of vacancies notified in 1965 for the said categories of workers was 8.768%. The vacancies for office workers including those in the field of Secretaryship and Business Management were the largest in number. In the field of Library Science, vacancies constituted 3.90%, in Journalism 1.13%, in Fine/Commercial Arts 1.80% and in Music 0.69%.

Taking the outturn in all the different categories it appears there has been an increase to the extent of 3,471 in the year 1964. There is an increase in outturn among science graduates and degree and diploma holders, in Fine/Commercial Arts, Drawing and Painting, Journalism, Library Science and Music. The number of Arts and Commerce Graduates and those obtaining degree and diploma in Secretaryship and Business Management appears to have declined slightly in the year 1964. Coming to the supply and demand position in this area, it appears that the job opportunities in the field of office work for which graduates are required, the supply appears to be more than adequate; but in the fields of Secretaryship and Business Management the position is reverse. In the fields of Fine Arts and Journalism the supply is not keeping pace with the demand. In the fields of Music and Library Science the supply appears to be more than the demand.

GUIDANCE JOURNALS AND NEWSLETTERS

I. INDIAN

<i>Name of Journal</i>	<i>Obtained from</i>
1. Journal of Educational and Vocational Guidance (Quarterly)	All-India Educational and Vocational Guidance Association, c/o Sub-Regional Employment Exchange, Muzaffarabad Hall, Proctor Road, Grant Road, Bombay-7.
2. Guidance Review (Quarterly)	Central Bureau of Educational and Vocational Guidance, 33, Chhatra Marg, Delhi-6.
3. Journal of Guidance Personnel (Bi-annually)	Bihar Council of Guidance and Personnel, Kadam Kuan, Patna-3.
4. Vocational Guidance Newsletter (Bi-monthly)	Institute of Vocational Guidance and Education, Government of Maharashtra.
5. Guidance Bulletin (Quarterly)	College of Educational Psychology and Guidance, Jabalpur.
6. Guidance Forum (Quarterly)	Bureau of Educational and Vocational Guidance, Government of Andhra Pradesh, Hyderabad.

<i>Name of Journal</i>	<i>Obtained from</i>
7. Guidance Newsletter (Bi-monthly)	Bureau of Educational and Vocational Guidance, Department of Public Instruction, 27, V Block, Kumare Park, West Extension, Bangalore-20.
8. Guidance Information (Bi-monthly)	State Bureau of Educational and Vocational Guidance, Radhanath Training College, Cuttack—2.
9. Bureau Bulletin on School Guidance Services (Monthly)	Bureau of Educational Research and Services, Government of Kerala, Trivandrum.
10. Guidance Periodical (At irregular intervals)	Bureau of Educational Research, Ewing Christian College, Allahabad.
11. Bulletins and Reports containing Current Occupational and Employment Information	Directorate General of Employment and Training, State Directorates of National Employment Information and Guidance Bureaus of Universities.

II. FOREIGN

1. The Personnel and Guidance Journal	American Personnel and Guidance Association, Inc., 1605, New Hampshire Avenue, N.W. Washington 9, D.C., U.S.A.
2. Journal Counselling Psychology	Journal of Counselling Psychology, Ohio State University, 154, W. 12th Ave., Columbus 10, Ohio, U.S.A.
3. The Vocational Guidance (Quarterly)	National Vocational Guidance Association, 20th and Northampton Streets, Laston, Pannsylvania, U.S.A.
4. Occupational Psychology	National Institute of Industrial Psychology, 14, Welback Street, London, W.I.

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9. Central Bureau of Educational and Vocational Guidance, 33, Probyn Road, Delhi-8 publications :
 - (i) In Farm and Field.
 - (ii) In Workshop and Laboratory.
 - (iii) Business in Business.
 - (iv) Dealing With People.
 - (v) Public Administration and Private.

(vi) Men in Uniform.

(vii) Crafts, Arts and Letters.

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23. Government of Bombay Vocational Guidance Publications :

(i) Earn While You Learn.

(ii) S.S.C.—What Next ?

(iii) Facilities for Commercial Education in the State of Bombay.

(iv) Courses for Non-S.S.C.'s.

(v) Social Work as a Career.

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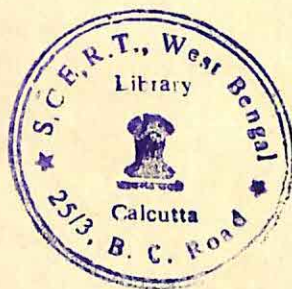
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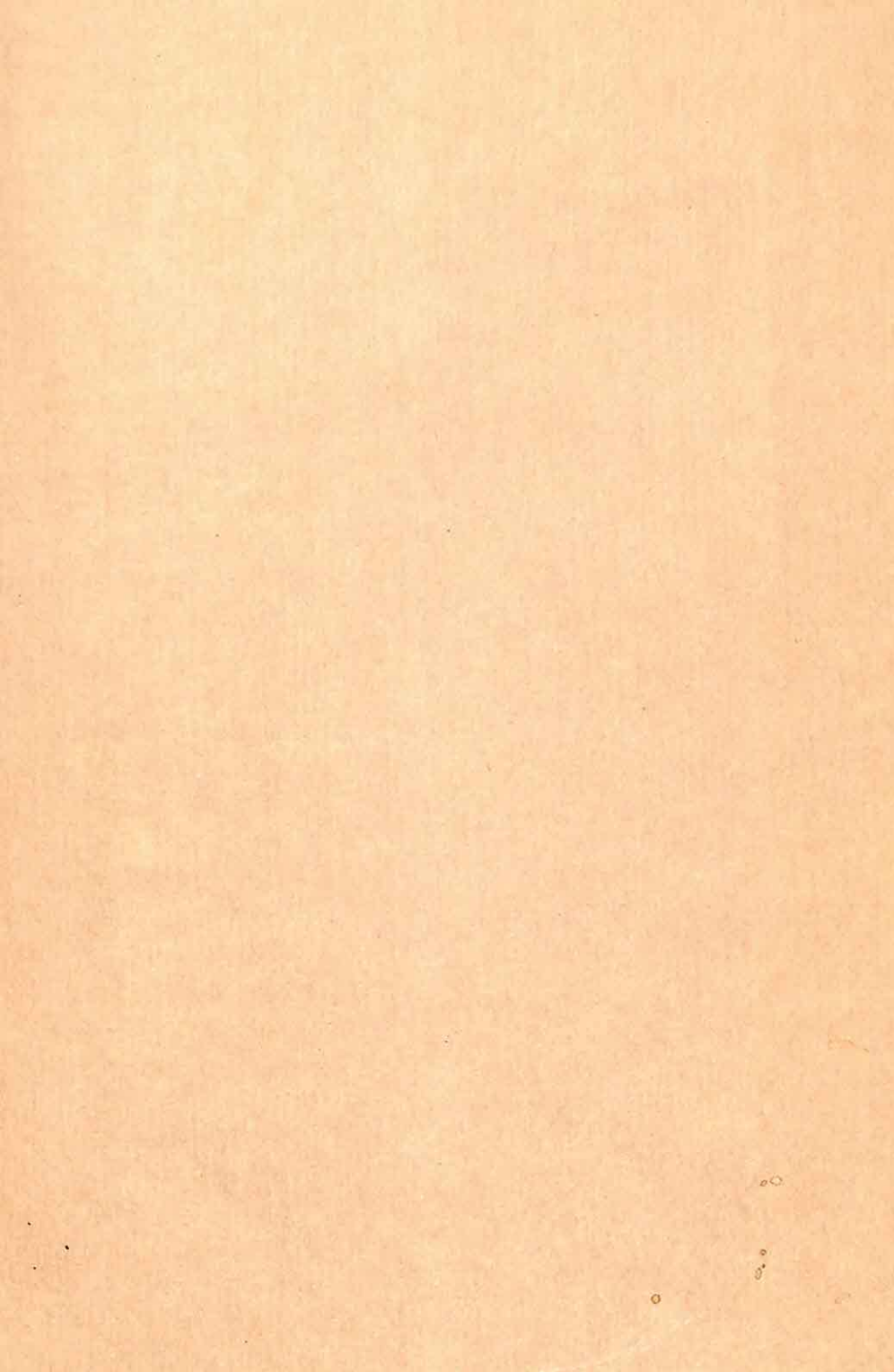
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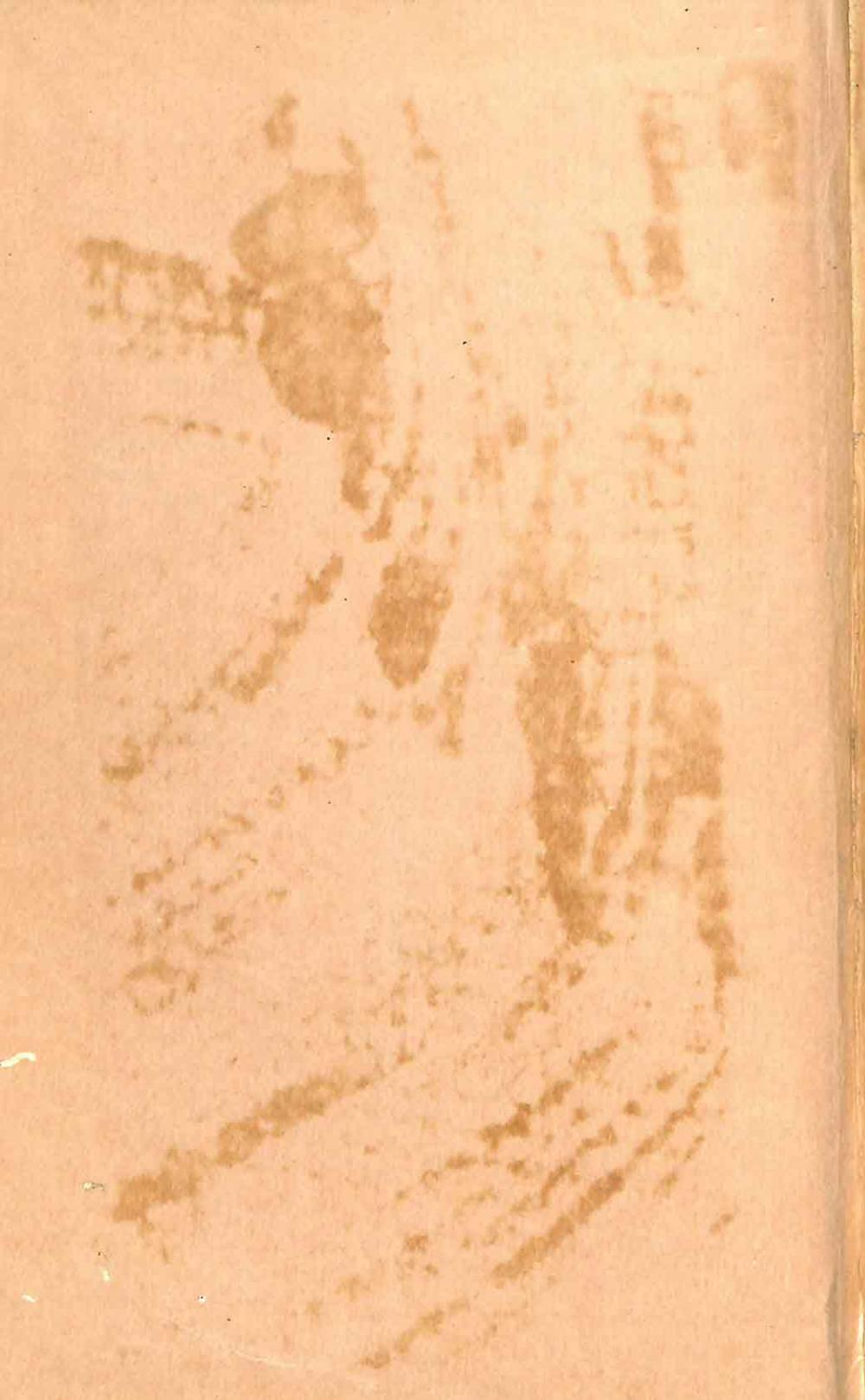
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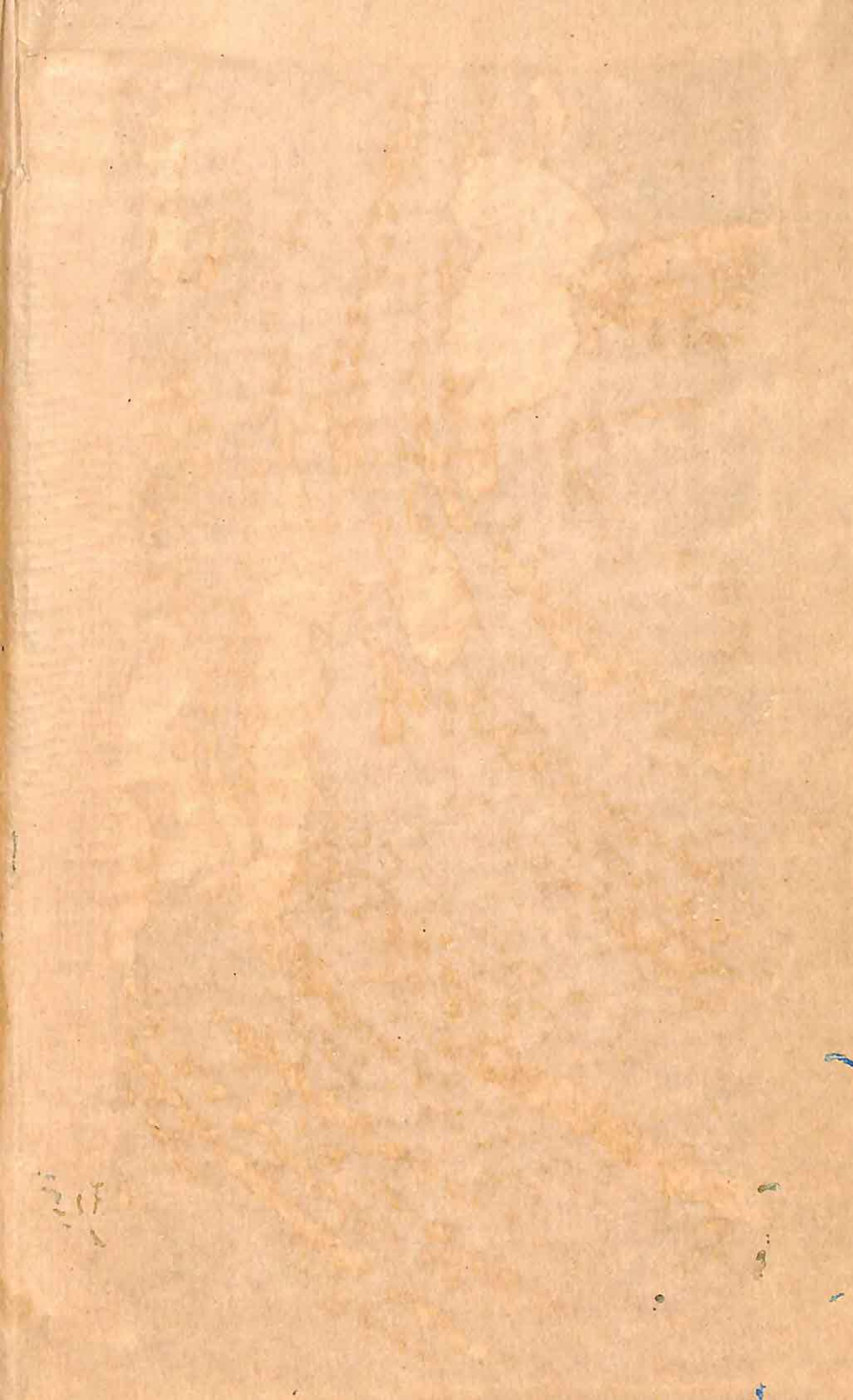
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